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EDUCATIONAL TOPICS OF THE DAY

CHIPS

FROM A TEACHER'S WORKSHOP

BY

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FEB 11 1888
28025

BOSTON
LEE AND SHEPARD PUBLISHERS
NEW YORK
CHARLES T. DILLINGHAM
1888

WF 1045
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Educational Topics of the Day.

TO

CAPT. W. C. MARGEDANT,

OF HAMILTON, OHIO,

This Book is Dedicated

IN GRATEFUL REMEMBRANCE OF HIS TRUE DEVOTION TO
POPULAR EDUCATION,
HIS ENTHUSIASM FOR RATIONAL TEACHING,
AND THE WISE SUGGESTIONS,
CHEERFUL ENCOURAGEMENT, AND WARM IMPULSE, WITH
WHICH HE AIDED THE AUTHOR IN THE
DISCHARGE OF HIS OFFICIAL DUTIES
AS SUPERINTENDENT
AND SELF-IMPOSED DUTIES AS JOURNALIST.

L. R. KLEMM, PH.D.

PREFACE.

MANY of the articles in this book appeared in the leading educational journals. They are here collected because they are thought of sufficient practical value to be thus preserved. In offering this book to the public, the author desires to have it understood that he does not undertake to present a complete system of education, but, beside some essays and historical dissertations, chips from his own educational workshop. Chips are useful for kindling fires. If these chips should help a little to kindle the fire of enthusiasm in the hearts of some teachers, they will be doing what they were intended for. Should the patient reader find a harsh word now and then in these articles, he may consider that they were written for the educational press; that is, for a purpose. To tone them down, would seriously change their character. Character is what a man is; his reputation, what people say of him. It is so with books. Whatever reputation this book may get, the author does not propose to let that interfere with its character. He gives *himself* in the pages of this book, his mode of thinking and discussing, his manner of teaching; and he sincerely hopes, that, though his manner may be found faulty, his sincerity of purpose, his good

intention to benefit his young colleagues, will not be doubted.

At present, the author is engaged in studying the schools in England, France, Holland, Germany, and Switzerland.

After his return from Europe, he will offer a second volume, under the title, "Chips from Educational Workshops in Europe."

HAMILTON, O., September, 1887.

L. R. K.

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CHAPTER I.

OPEN LETTERS TO A YOUNG TEACHER.

EDUCATIONAL TOPICS OF THE DAY.

CHAPTER I.

OPEN LETTERS TO A YOUNG TEACHER.

FIRST LETTER.

METHOD AND MANNER.

My dear Young Lady, — You seek information upon a commonplace subject, which, I will admit in the beginning, is not commonplace at all. You ask, "How would you impart knowledge to normally endowed pupils? What method would you prefer for young children?"

Did you consider that I might say, my young friend, there is no such thing as imparting knowledge? Reserve your incredulous smile until you have heard my explanation. I mean to say that any one who uses the term *imparting knowledge* speaks erroneously, as it is wrong to say the sun rises or sets: he does no such thing. To impart knowledge, evidently means, to convey, to make knowledge part of the learner. Now, this is the very thing which, I claim, is impossible.

Compare the psychological process of learning, with the physiological process of digestion. True, this is

a homely illustration, and not the most æsthetic; but it is the most available. Can you impart a beefsteak to another person? You cannot. You can cook it well, serve it daintily, offer it with one of your sweet smiles; but make that beefsteak a part of his body you cannot. The person will have to do the biting, chewing, swallowing, digesting, and assimilating, himself. You may season the beefsteak admirably, you may make it palatable, you may do any thing and every thing to entice him to eat it; but you cannot perform the process of digestion and assimilation for him.

It is exactly so in teaching. You cannot impart knowledge. All that you can do, and that, I insist upon it, you must do, is to make knowledge palatable, to serve it well, to select it with reference to the child's mental stomach, to prepare it so that the child will be enticed to partake of it; but impart it you cannot. The child's intellect grows as a plant does, from inside outwardly, not from without inwardly. Therefore, if you should hear of any one of whom it is said that he understands the art of imparting knowledge, you may take it for granted that something else is meant; namely, that he understands the art of cooking and serving facts well. Really, my friend, the teacher is to be a good cook of mental food; and it depends upon his professional training and his experience, whether he becomes a *chef*, and can make *chefs-d'œuvre*, and deserves a salary such as is paid to a *chef de cuisine* at Delmonico's or the Hoffman House, or a

Bridget who tortures the family with execrable experiments, and is finally degraded to scullery work.

Do not feel down-hearted or insulted because I compare the teacher with a cook, for all similes are more or less lame. Remember that we may compare the teacher's profession with that of the physician, and you will feel consoled. Diseased digestive organs need specially prescribed diet, and so you will be obliged to diet pupils whose mental faculties are either in an acute or a chronic state of disease. Here, you see, we are approaching the domain of the physician. But, forsooth, there is more similarity between the cook and the teacher than we are willing to admit. I am very sorry to say that few *chefs* in teaching have ever reached the salary which *chefs de cuisine* in some large hotels in New York receive; but it only proves the truth of what a lady of my acquaintance sometimes says, with a reproachful look across the table, when I find some dishes not suited to my palate: "Men are all stomach." As a rule, we prize our stomachs higher than our brains. Remember that when a man is obliged to economize, he begins by stopping his journals; he thinks he can afford to dispense with mental food.

When I say the teacher is like unto the cook, I do not mean to exclude the other, a more vital, part of his duty, which consists in training the child. He is to be at all times both a teacher and a trainer. I merely mention this to avoid a misunderstanding which might arise in your mind, as to the importance

of the teacher's profession; but I answered your question, "How do you impart knowledge?"

And now your second question: "What method do you prefer for young children?" I seriously think that you are not quite aware of what the word *method* signifies. When Shakspeare said, "Though this be madness, yet there is method in it," did he use the word "method" correctly? Or, when a corn-doctor advertises his method of cutting corns to be far superior to that of any other doctor, does he use the word "method" correctly? Reflect upon these two cases, and then listen to this definition: *Method is a way of reaching a given end by a series of acts which tend to secure it.* There can be no question as to Shakspeare's correct use of the word. In our days, the word "method" has fallen into disrespect by abuse. The educational journals are full of small, insignificant devices, all termed methods, which are nothing else than variations of one and the same thing. People confound mere mannerism with method. Let me quote an authority on this subject, — Dr. Soldan of St. Louis: —

"Perhaps this difference between method and manner will appear better, if we use an illustration which is supported by the etymology of the word 'method.' Suppose it is proposed to establish a connection between two cities. For this purpose, a road is made. This road will be used by all that go from one city to the other, and by all kinds of individuals: it is the same road for all, and not liable to be

changed by individual whims or notions. But the manner in which the road is used varies very much: some will walk, others will run, and others still will ride. The road, in our illustration, represents the method in pedagogics. It may be used by the most widely different individuals: the way in which people make use of it is the manner. Manner cannot be thoroughly specified or defined. Here the utmost freedom must be allowed to teachers and pupils, to develop their own individualities."

SECOND LETTER.

"SIMILIA SIMILIBUS CURANTUR."

MY DEAR YOUNG FRIEND, — You desire my advice as to what to do in a case of chronic laziness in a pupil. It is very difficult to advise by correspondence, — just as difficult as it is for a physician to cure a patient without a proper diagnosis made in his presence. Still, there are general rules evolved from numerous analogous cases, principles deduced from practice, which, if applied, may cover the case in question. I should, therefore, when brought face to face with the necessity of punishing, try to apply the principles underlying all punishments and rewards. One of these is, *Punishment should be in harmony with the offence.*

This sounds rather philosophic, but it is eminently practical in its application. According to this rule, you would "keep in" a child who came late in the

morning, as many minutes as its tardiness amounted to. According to the same rule, you would withdraw your confidence from a child who is given to prevaricating. According to the same rule, you would corporally punish a child who has been found cruelly torturing an animal or a schoolmate; that is, you would make him feel pain, so that he may understand pain.

The homœopathists in their medical practice follow the principle, "*Similia similibus curantur*" (like things are cured by like). Now, if you will bear in mind that a punishable child is a morally diseased child who is to be treated properly in order to be cured, you will see that there is a remarkable similarity between the teacher's and the physician's practice. Not that I mean to say that the *teaching* should be done in homœopathic doses. Heaven forbid! Let us be allopathists in that. But in punishing, and more especially in rewarding, we must be homœopathic by all means.

Now, my dear young lady, I can imagine how your lustrous blue eyes fairly twinkle with the mischievous desire to nonplus me by asking, "If I am to apply the rule, 'Like cures like,' how am I to apply laziness in order to cure laziness? Or, take a case of uncleanliness?" It is a fairly victorious smile with which you propose this question; yet, my young friend, your question is easily answered. Permit me to frame my answer in my own way, by first introducing it by general remarks.

Preaching about faults, and admonishing, never yet improved the morals and manners of any one, particularly not those of a child, who is not able to comprehend your good intention or your doctrine. The child's ethical feeling is blunted by much fault-finding and blaming. There is scarcely a fault in human nature but which can be successfully eradicated in early youth, provided the proper remedy be applied, — a remedy suitable to the individuality of the child. We are very apt to use "heroic means,"—brutal means, we mean, but dare not say so. It is a well-known fact, that the first boy in a numerous family is oftener punished corporally than all the other children. As the parents advance in years, their discretion and dire experience teach them better modes of training.

And now to our case of laziness. I was not the oldest in a line of five children, nor the youngest, for which I offer thanks devoutly and fervently to Him who thus decreed it. I escaped the rod at one end of the line, and being spoiled at the other. I remember with remarkable vividness, that, when I was about ten years of age, I had a "spell of laziness." Not only was I lazy in school, but also at home. You know, or ought to know, that there are times in which a child (be it from physical or psychical causes) is more or less indolent; a time in which he hates school, does his tasks carelessly if at all, and is bent upon things foreign to any thing like duty. Punishment-exercises, increased demands upon his activity (such as writing a list of words ten times), only increase the unwilling-

ness to work; corporal punishment makes the child morose and obstinate. Most teachers (and I use the word *most*, advisedly) stand before such a case as before an enigma whose solution ought not to be difficult.

Listen to what my wise father did. When the first teacher's note came home, announcing my sliding into disgrace, he looked at me, but said not a word; I noticed, though, that his watchful eye was ever upon me for a number of days. A week afterward another, this time rather lengthy, letter came by mail, setting forth my shortcomings and failings. My father read it to me, and then said, "I see, my boy, you are bodily weak. I think you are growing. I'll keep you home from school, and give you a chance to recuperate. You need not work at all until you come to the conclusion that it is better for you to work than to do nothing."

Who could have been happier than I? I thought my father the wisest of mortals, and then proceeded to enjoy a chapter or two of "Robinson Crusoe;" but, lo! father mine took the book out of my hands, saying with a benign smile, but with a badly concealed twinkle in his eye, "Reading will hurt your eyes, and, when bending over the book, your back will suffer." Well, I "did not see it," but obeyed; taking up a kitchen-knife (you know that is always the sharpest in the house) to whittle a mast out of a chip to rig my boat. Again father mine interdicted, saying something of repose needed for the muscular system. Just then

mother needed coal in the kitchen, and called me to fetch her some. I jumped up with delight, ready to go to the coal-shed. But father mine sagely remarked, I must not be disturbed, lest my growing bones might suffer; and then went out with the coal-bucket.

I began to doubt the wisdom of that father of mine. But then it was delicious to lie on the lounge, and do nothing, so I stretched myself ready for a nap. I had scarcely fallen asleep, when I was rudely awakened by a wet ice-cold cloth, which father mine had applied to my head, saying I evidently had a headache, and he meant to cure his dear boy. To make a long story short, I was not permitted to do any thing, — work was prohibited, amusement prevented. Yet I got through the first day without dying of *ennui*. I even got through the second day; at the end of which my belief in father's wisdom was firmly re-established, for I now saw clearly that he meant to cure laziness by laziness, or like by like.

Still, young as I was, I did not mean to be outwitted, and braved out another day; but ask me not to describe it. I was not of a phlegmatic temper; and you may imagine how I felt all through that long, weary day, which seemed to me to be the bigger half of eternity. On the evening of the third day I "caved in," and announced that I "guessed" I was again strong enough to attend school on the morrow. My father's face beamed with happiness, that his dear boy should have been cured so soon; he had been prepared

to hold the fort against "demon diligence" a week, but, if I thought my strength had returned, I might try school-work next day. And so I did; but I carried a letter to my teacher in which the secret of my cure was not mentioned, for which omission I inwardly (very inwardly, rest assured) thanked my father.

I remember well that one of my sisters was treated similarly when she had her spell of indolence. When she appeared in the kitchen, mother would, with much solicitude for her health, say that steam might hurt her lungs. When she proceeded to sew for her dolls, it was said she must not exert herself. When she wished to take a walk with the other children, she was compelled to lie on the sofa, etc. With knowing glances I watched the course of treatment. It was amusing for me to see father and mother act in harmony with a consistency which could not deserve a better purpose. It had the same salutary effect as in my own case.

Now, my dear young friend, your victorious smile has disappeared, — almost, not quite, for yet you have something *in petto*. "*What of the want of cleanliness?*" you ask; "how will you cure that? I cannot perceive what remedy will cure that, except good example."

I knew a boy who was the terror of his mother on account of his criminal disregard of appearances. Dirty face, soiled and torn clothes, muddy boots, etc., —I need not further enumerate: the boy is by no means an exception. I advised her to apply my homœopathic principle. She entered upon the idea

with enthusiasm, and was successful. This is the way she proceeded:—

"Hugo, your clothes are always torn; you are, therefore, accustomed to wearing torn clothes. I shall henceforth abstain from mending your pantaloons and jackets." The boy cared nothing, and soon wore out his best "Sunday-go-to-meeting suit," as well as his every-day clothes. When he called for a clean collar or a handkerchief, mother would offer him a soiled one, cast aside by his brother, as being good enough for him. The boy protested, but with no avail. Finally his clothes became dangerously dilapidated, especially his breeches at a certain unnamable place. He asked for a new pair; an old pair cast off by his bigger brother was offered as "good enough for him." In short, the boy was soon convinced that cleanliness is next to godliness; for his young playmates fell off from him like friends in need, of whom it is said that a hundred weigh no more than an ounce. The other boys disliked to play with such a wretched-looking fellow; and he soon learned the bitter lesson, that, despite all inner value, appearances play an important *rôle* in life.

Well, I hope to have convinced you, my fair young friend, of the truth that "like cures like" in pedagogy as well as in medicine. Modify these examples, change the mode of procedure to suit the circumstances of school, and you have powerful levers for cases of laziness and want of cleanliness.

THIRD LETTER.

CAUSE AND EFFECT; OR, HOW TO KEEP YOUNG.

My happy Young Friend, — It is a serious question which you ask me in your reply to my last letter, — more serious than you in your sweet innocence think; serious and important because it concerns the very essence of success in teaching, as well as in every other domain of human activity. Pardon me if I quote your words: they are too pithily framed to be buried ignominiously in the waste-basket. "Do tell me how I can keep young. Our superintendent, a venerable old gentleman with a wrinkled face, as full of acidity as a persimmon, remarked sagely on the platform: 'Teachers must endeavor to keep young.' I hadn't the heart to ask him for his own elixir, fearing he would prescribe a remedy which would make a mummy of me in fewer years than it did of him. But he said it with such an air of conviction that I felt there must be some deep truth in it. Now you, dear Doctor, have so happy a disposition, that if the advice had come from you I should have believed it implicitly. Do tell me the secret of preserving youth. Looking around at my numerous fellow-teachers, I notice many sour faces, which speak of disappointment, weariness, and any thing but serenity and preserved youth. Shall I be like them in a few years?"

Well, my dear friend, Pindar, the great Greek poet and contemporary of Pericles, said that in the land of

the departed it was spring all the year around. If the teacher's work is to be successful, it must be done in continual spring air: neither in the icy atmosphere of cold reason and cutting sarcasm, nor in the withering heat of passion. While the brow of the merchant, artisan, or day-laborer may be clouded without greatly interfering with the progress of the work he is performing, the countenance of the teacher must be sunshiny and bright. From her heart must forever issue forth a stream of cheerfulness, because her disposition is reflected in the susceptible souls of her pupils.

It is said that interest acts upon the learner as sunshine and moisture do upon the vegetable germ in the ground. Now, the most important source of interest is the love for the teacher. A sour, moody temper will effectually kill the affection of the pupils, while cheerfulness will awaken it. "Cheerfulness," says Jean Paul, "is the sky under which every thing flourishes exuberantly, save poison." While I readily grant that cheerfulness is not dependent upon age, I notice that it is more frequently found in youth. Your superintendent, therefore, is right in his advice; and he is the more sincere in it since he, perhaps, feels the want of it in himself.

Now, for the sources of this everlasting youth and vigor. I like to speak in similes. The Greek mythology speaks of a giant whom Hercules had to conquer. During the combat, Hercules observed that the giant lost his strength when he was lifted up from the ground, and that his strength returned when he touched

"Mother Earth" again. This is a proper illustration of your case. To remain young, means to preserve an interest in every thing and everybody surrounding you. This looks like a more formidable task than it really is. Teachers very frequently resemble the man who digs a hole into the ground, and throws the soil up around the edge of the hole. The deeper he digs, the higher becomes the embankment, and the smaller his horizon of vision. That is to say, being occupied with small thoughts, little things, weak and childish efforts, insignificant trifles (significant enough for both pupils and teacher in their work, but insignificant in regard to other things going on in the world), they are apt to lose sight of what goes on in the community, among the people, — in fact, upon the world's stage.

To avoid this atrophy of thought, you must be a diligent reader, and read at least one good daily paper, one bright, sparkling weekly educational journal, and several literary monthlies. The daily will keep you *au fait* with events in your immediate surroundings; the educational journal will give you wise advice, new thoughts and suggestions for your professional work, and will preserve you from sinking into that detestable swamp called self-sufficiency and self-satisfaction. A teacher who reads an educational journal, and profits by it, will never consider herself "finished." The excellent monthlies (I am not an agent, and therefore abstain from enumerating them) are so admirably conducted, that they set before you a palatable *menu* of historical, scientific, and other

literary essays, thought-bearing and therefore thought-awakening. Do not fall into the terrible mistake of reading journals, newspapers, weeklies, monthlies, etc., indiscriminately by the dozen. It weakens your intellect and your memory, as over-eating will weaken the digestion. You need to read good books, fictitious and otherwise. I trust to your good sense and still better taste, that you will not squander your time in reading trashy novels. So much for the intellect.

Now for your emotions. To keep young, means to preserve the power to love, — love for children, and, for that matter, love for the grown folks too. Love for children necessitates that you should interest yourself in their homes: their private affairs are your affairs also. A knowledge of their home surroundings is absolutely necessary for you to understand their dispositions, their susceptibilities, their sensibilities, in fact, their entire beings. If some thoughtless person should consider you a *crank* for thus interesting yourself beyond the schoolroom in the children's affairs, let me comfort you by saying that *the crank is one of the most necessary devices for mechanical motion.* There is not a machine without a crank; and woe to a body of teachers, a community, or any body of people, without at least one crank! Be you the crank, the crank of never-wearying affection, interest, solicitude, kindness, and charity, to your school; and the glow of enthusiasm and the warmth of maternal love will keep you young, though you may be covered with the mimic snow of age.

But, you may say, keeping young in mind and in heart is not keeping young in body. What shall I do to keep young in body? The everlasting principle of cause and effect holds good in this also. It is said, "*Mens sana in corpore sano;*" and the opposite is true also. That is to say, happiness, a cheerful disposition, and a bright mind, have their inevitable beneficial effects upon the body. They promote bodily health. Again a simile may illustrate a point. A hot-house plant withers when placed in the open air; and, alas! most schoolrooms are hot-houses, in the literal sense of the term. They are invariably over-heated. Keep the temperature to 65° F., and have the prudence to hang your thermometer, not ten or twelve feet above the floor, for safe keeping, as I found it some time ago in one of my schools, but only two or three feet above it; in other words, in *that* stratum of air in which the children are compelled to abide.

Not only the temperature, but also the composition of the air, should be considered. Therefore, ventilate your room. Ventilation is derived from *ventus*, the wind; and therefore ventilation implies circulation or agitation of the air. As often as possible, therefore, change the air in your room completely. Yours and your pupils' rosy cheeks, elastic gait, gay spirit, bright looks, and happy disposition will be preserved.

And last, but not least, don't worry. "Sufficient unto the day is the evil thereof." Don't talk and think "shop" all the time. Nothing ages so much as

a burden of worry. Above all, do not worry about the results of examinations. Be social, but do not keep late hours. Engage in some work totally different from the work done in school. Hear a good concert now and then. Be happy, and seek the company of happy people. Seek the chance to laugh heartily as often as possible.

I shall not engage in telling you what to do in cases of sickness, but will conclude with a little advice which may seem outlandish, but is eminently sound. As a rule, the Americans have very little imagination; they pride themselves on being dry, matter-of-fact people. Look at the Germans, and see what happy people they are, even in old age! It is one of the postulates of German education, that imagination must be fostered. In Germany, fairy-stories are indulged in in youth to a much greater extent than is done in this country. Goethe's mother was one of those happy persons who see even on the darkest cloud a rosy border, whose temper is never ruffled, who sing and laugh and dance through life, and who beautify the lives of all who associate with them. She invented numerous fables and fairy-stories for her children, and liked to tell them to her boy Wolfgang. When she was well advanced in years, and her son had reached the highest height of fame and glory, she was asked how it came that Wolfgang resembled her so much in thought and action. "Ah," said she, "Wolfgang and I were young together." Go thou, my dear young friend, and do likewise.

I cannot close my letter without a solemn word of censure. Reverence for old age will not make you old before your time, especially if that reverence is shown to a superior officer such as your superintendent. You may not consider your words, as quoted above, meant to be irreverent; but they sound like it. Avoid even the appearance of irreverence.

FOURTH LETTER.

THE OLD, OLD QUESTION.

My dear Young Lady, — You are in distress again, you say, because you fail utterly in suppressing noise in the schoolroom; particularly is it "demon whisper" that will not down. You write, "Of course it would be foolish to punish the children for communicating; but, having several grades of pupils in one room, I am compelled to leave one or two of them to themselves, that is, give them something to do, while my attention is engaged with another grade. Now, I cannot watch them constantly. Shall I appoint monitors to do the watching? If not, why not?"

Your letter calls up in my mind a similar experience of my own. When I was young in years, — for young in heart and mind I propose to be till my dying day, — I taught a school in the country. My room was joined to another, and in these two rooms two teachers were engaged in teaching two hundred and sixteen pupils; I had the "bigger half" of that number. Like yourself, I thought I had to suppress whispering and noise;

and I employed even so-called heroic means to stamp it out of my school. Like yourself, I gave the pupils something to do, it mattered little what. I failed utterly. One day my colleague mildly suggested that I made my life and that of my pupils wretched to no purpose. "For," said he, "you try to suppress all noise, aiming at a quietude in which a pin may be heard falling. The school ought not to be like a churchyard, but like a workshop, in which work, hard work, and much work, is performed. Work implies motion; motion implies noise. There must be always a certain degree of bustle and noise in a school. Where it is suppressed, I pity the children."

Of course, this remark was so just and wise, that I concluded to profit by it; and I have never since rued it.

But you do not mean that kind of noise which is the inevitable companion of earnest work. You mean noise which is made unnecessarily, and is the outcome of mischievous intention. The old apocryphal writer Sirach wrote more than two thousand years ago upon the subject, suggesting to employ children in order to keep them out of mischief. Now, the difference between employment for the hand, and fruit-bearing work, is very glaring. In order to make the pupils do the work assigned, with interest, it is essential that the assigned task should be in strict harmony with what you have prepared with them: in other words, you must awaken interest.

For instance, if they read a story in their reader

which they liked, it would be well to ask them to copy that story nicely for you. It is reasonable to suppose that they will go to work quietly, and do what is asked of them. If you have prepared the number lesson, as every lesson in arithmetic should be prepared, mentally, then set them to work to solve similar problems. Knowing how to go to work, it is again reasonable to suppose that they will make good use of their time. If they have had a lesson in orthography, such as words with "ough," ask them to find a dozen or more words in their reader that contain "ough." Again it is reasonable to suppose that they will evince much interest in finding such words. If they had a lesson in geography on river-systems and kindred topics, ask them to trace the Mississippi, or whatever other river you may choose, and to write out the names of its tributaries in two columns; the right tributaries in the right, the left tributaries in the left column.

In fine, I mean, every task to be done by the hand should be prepared in an oral lesson preceding it. You may rest assured that every undefined or poorly understood task gives rise to disturbances of various kinds, like communication in whisper, annoying questions to the teacher, consulting of books and slates, etc.

Acting upon this advice, you will find that the amount of whispering and noise will greatly decrease, if not vanish entirely. But be sure to make the tasks reasonably short. If they are too long, or if the

time allotted for them is too long for doing the work, the children will seek relief in all sorts of distractions, of which whispering is the favorite.

It will never do to scold the pupils for seeking relief. Always look for the cause of the trouble in yourself. Teach rationally, assign tasks which you are sure can be performed, and you will not need to suppress the "demon whisper." Of course this mode of acting will not permit the teacher to sit on her throne of idleness, — that is, at her desk. She must be constantly moving. She must, even when hearing another class, keep an eye upon those who are quietly at work; must even go through the aisles, and inspect the work going on, helping here a lame duck, suggesting there, mildly and quietly, reprove where it is necessary; in short, act like the motive power in a machine.

Oh, yes, I see a veil falling over your lustrous blue eyes; and a reproachful glance strikes me, by which you mean to convey, "How shall I be able to stand such exhaustive work? Will it not wear one out in a short while?" No, my dear, it will not: it is not near as exhaustive as one good round sally of reproof and scolding. Anger causes loss of vitality much sooner than those quiet, pleasant, helpful ways, and the quiet, willing work of the children. I am sorry to say that, if it should wear you out, you must find consolation in the cruel statement, that the schools are not made for the better accommodation of teachers.

As to monitors, do not appoint any. They cause

more mischief than can be righted. I have seen children grow absolutely wicked by acting as monitors. Rather appeal to their finer sense of honor, than place one of their number over them to watch them. It engenders a feeling of pride in the monitor, and a feeling of resentment in those who are reported as transgressors.

I have a personal and exceedingly unpleasant experience with monitors, which leads me to be thus outspoken. When I was a boy, I went to a school whose teacher was master of the chair in a Masonic lodge. He was frequently called to assist at burials of brethren, and he always placed a monitor from out of our ranks over us. One day the monitor reported that Klem deserved punishment. Now, there happened to be two Klemms in that school, — one who spelled his name with one *m;* the second, myself, who spelled his name with two *m's.* The teacher grasped the nearest, and lammed him most furiously, saying, "I will teach you rascals how to behave when I am out!" I happened to be the unfortunate one. The monitor, harboring ill feeling against me, did not arrest the teacher's arm. He stood by without saying a word, until the process of inflicting a wholesome lesson was concluded. Then he coolly informed the teacher that he guessed he had better begin over again with the other Klem, who spelled his name with one *m.* It is barely possible that this incident prejudiced me against monitors in general.

FIFTH LETTER.

SKETCH OF A GOOD SCHOOL.

My interesting Young Friend, — In reply to my last open letter, you have the kindness to say that my personal reminiscences are interesting, and that you desire to hear more of them. I can imagine how brimful of laughter you must have been when you saw your stately friend whipped by mistake; but I assure you, though the job was done well, it was not appreciated by me at the time. I cannot record another case of that kind, nor would it do to palm off every corporal punishment which fell to my lot as having been inflicted by mistake. Nor were all the teachers I had like the one I mentioned.

In order to make these letters instructive as well as amusing, I will proceed to draw the outlines of what I consider a good school. The task is very easy. I will take you into the school which I attended from my tenth till my sixteenth year. There is a great cry heard in the land, that pupils are obliged to study too many branches. This is an erroneous statement. The difficulty lies elsewhere. It is not the number of branches, but the manner of studying them, that causes dissipation. Permit me to sketch the way we were taught in the school mentioned above. We had two languages, Latin and French. To-day I remember very little of my Latin, but a good deal of my French. Why? The Latin was taught to us very much in

the way of a post-mortem examination. There was no Latin conversation, no Latin composition; nothing but humdrum translation and veritable dissecting was done. Our French teacher permitted no translations: all was life in his lessons. He talked to us in French; we caught the pronunciation, made use of our limited vocabulary, and in a short while we boys used French as if it had been our mother-tongue. We had mathematics, but no text-book. We never saw a text-book of mathematics. All we were required to have was a ruler, a compass, and a number of note-books. The teacher supplied the subject matter. We had astronomical and physical geography, and as text-books nothing more than an atlas, and drawing-materials for drawing maps. The teacher was supplied with a tellurian, relief maps, and other appliances.

We had geology, zoölogy, and botany, and a text-book for all three branches no larger than a primer. The school was supplied with a set of illustrative charts, and a well-stocked museum of natural history, which contained a plentiful set of minerals, stuffed animals, an herbarium, and numerous preparations of *papier-maché*. We had anatomy and physiology, but no text-book for these branches. Instead of that we had a complete skeleton, a manikin, colored charts, and numerous preparations of *papier-maché*, plaster-of-paris, and rubber. We had history, and a teacher whose cheeks grew red with enthusiasm when he narrated to us the glorious deeds of ancient and modern nations. Our text-book contained sixty pages; it was

a little pamphlet. Oh the wonderful moments when we listened to him with bated breath! We were Greeks with Pericles, Carthaginians with Hannibal, Romans with Cæsar, Goths with Theodoric, Franks with Charlemagne, Swedes with Gustavus, Prussians with Frederick, Englishmen with Marlborough, Americans with Washington.

We had natural philosophy, and a laboratory in the basement. We had history of literature, and a library of several thousands of the best books. We had rhetoric and elocution, without even knowing that we were studying these branches: it was done in a practical way, that resulted in efforts not to be despised. We had drawing and singing; we had gymnastics and excursions. In fact, our course of study was a very complex thing; but we obtained a goodly stock of knowledge, and a fair degree of skill, because we were made to acquire them by self-activity.

Here is an example of a lesson in zoölogy: The stuffed swan was brought into the class. The professor stated the characteristic features of the swimming birds; then we were called upon to find these features in every other species or family of swimming birds, which latter were exhibited either *in natura* or in pictures. Then things were discovered, and accurately stated, which proved their dissimilarity. Thus, around that one stuffed bird was grouped all our knowledge of such birds. Afterward we had to write down what we had learned. And this latter procedure was the best thing of all; for it was taken

for granted that we knew nothing of a subject unless we could make it clear to others. Sometimes an oral statement was sufficient, but it had to be complete; no essentials were permitted to slip our notice. When review week came, the pupils were allowed to catechise each other. Through all these studies there was noticeable the red thread of language-instruction. All instruction was instruction in language; and we were trained in an easy and elegant use of the mother-tongue without the paraphernalia of parsing and dissecting, — simply by a careful *use* of the language.

Each class made frequent excursions into shops, mills, factories, and into the woods. When we went into the woods, each one of us was armed with a small hammer for breaking minerals, pincers for dissecting plants and blossoms, pins to fasten insects on cork or our hats, and a tin box hung over the shoulder by means of a strap. No one was without his note-book, in which he entered a sketch of the journey, and new names. Ten pennies (two and one-half to three cents) for a glass of milk at a farmhouse, and a roll of bread, was enough to keep body and soul together. What an indescribable charm these excursions had to us!

We fought the famous battle of Marathon over again, not in sunny Attica, but on a pasture or a stubble-field nearer home. I shall remember to my dying day, that, much to my regret, I had to attack the Pass of Thermopylæ on the side of the Persians. In the Neander Valley we dug up remains of pre-

historic men. Our professor in history, then a man in the prime of life (may kind Providence grant him a happy old age!) stood in the midst of his pupils, and with glowing cheek, and the chest-tone of conviction, told us how brave Frederick had defeated the French, and sent them flying across the Rhine; and amid the ruins of the ancient Falkenburg he made clear to us the victory of modern thought, and civil virtue, over the old feudal system.

All our knowledge was *experience*, not dry book-wisdom. Coming home from such an excursion, or from a visit in a factory, we could scarcely wait to get a meal, so eager were we to write down an account of what we had seen and learned. School was a perfect paradise to us. Our school-bag was not heavy. The intercourse between pupils and teachers was very pleasant, because the teacher shared all the hardships with us; and a case of truancy was unheard of.

And now I come to the best feature of our school. There was no rivalry among the pupils (the worst kind of mental dissipation), except in this: that each one of us strove hard to be recognized as "Primus" of his class for good deportment. That was a great honor; for to the "Primus" was intrusted the class-journal, that important book upon the leaves of which were immortalized the flower of the school. And there was no per-cent system of marking and grading. Every examination consisted of compositions (except in mathematics). So, for instance, in physiology or any one of the branches we studied, a limited number

of themes were given out; each pupil could choose one, and write as complete a dissertation as possible. These productions were not gauged on a scale of one hundred, for that would have necessitated little matter-of-fact questions which embraced nothing but bare facts. The examination papers were either satisfactory, or they were not; in the latter case a second examination was required after a few weeks.

It will easily be seen, that we were required to learn much; but it will equally easily be seen, that we did learn a great deal more than we could have learned from books. But despite the multitude of studies, there were no mental cripples among us. Each one went to the limits of his capacity. All this was owing to the methods pursued.

SIXTH LETTER.

STIMULANTS IN TEACHING.

My young Friend, — I was amused and astonished that my remarks about competition in school, and my slur at marking and grading, which you had found in my fifth letter, should have disturbed your mind. You ask me why I think that daily marking of pupils' work is an objectionable practice, amounting to a crime? I hasten to answer, and hope to show you the criminal aspect of the case.

Now and then we find teachers who spend the better part of their school-hours in marking their pupils' work, and recording results. That this is

considered a perfectly legitimate practice, may be seen from the fact that class record-blanks are published in great number, which make this marking of lessons a special feature of school-work. The main argument of teachers who use such blanks is, that they need something to stimulate their pupils' activity.

Some of them are firm believers in the temperance or abstinence cause, and if any one, drunkard or otherwise, in their presence should claim that he needs alcoholic drinks to stimulate his appetite, these truly virtuous teachers would be horrified to hear it: yet they do a similar thing in school, and do it with a vengeance. It is reasonable to suppose that a good healthy person needs no stimulants. Food is taken willingly, digested and assimilated readily, without the aid of stimulants; provided, always, the organs of digestion are in prime order. It is only jaded appetites which crave stimulants.

Now, if a teacher claims that without the use of marks and similar paraphernalia, such as rewards (praise, cards, presents) and punishments, she cannot make her pupils work and study, it is also reasonable to suppose that their intellectual appetites are jaded, — in other words, that they have been brought up from the earliest primary grade on a diet of stimulants; or, that the intellectual food she offers is so unpalatable, stale, or tasteless, that an artificial stimulant, such as a Worcestershire sauce of marks, is needed to make it "go down."

Don't talk of ambition needing to be stimulated!

Every healthy organism will, at regular stated intervals, demand food, and develop an appetite. And so will a healthy youngster want intellectual food, without being stimulated by an appetizer in the form of a reward or punishment. Reward should only be given for any thing done in excess of duty, and punishment for neglect of duty.

In all our teaching we should look toward the requirements of actual life. It is a well-known fact, that in life the simple performance of duty is not rewarded. It is not even fully paid; and it seems extremely hazardous to accustom our boys and girls to expect a reward for simply doing their duty.

Naturally, experienced teachers will say, in the foregoing argument, we presuppose our pupils to be normally endowed with intellectual appetites: experience, however, teaches that that is a fallacy. To this I answer: Dyspepsia is not an hereditary disease, but invariably the sequence of maltreatment. That treatment may date back to infancy, but in some period of the child's life maltreatment has made the organs of digestion weak. It may be granted, even, that there is a tendency to dyspepsia in the new-born child, just as there may be a tendency to tuberculosis; but with careful treatment the tendency could be overcome.

Now, view psychological organs as we do physiological; and we may say, maltreatment, at some stage of the child's life, is the cause of this apparent necessity for using stimulants in teaching. No sane person, endowed with five senses, is left without an undying

desire to acquire knowledge. Now, feed the child with indigestible sole-leather, such as learning rules from the printed page before they are applied, tested, and experienced by the learner, and soon the necessity of stimulants will make itself felt. Pupils who are taught rationally, according to the laws of psychology, never need stimulants nor appeals to their ambition.

Fancy a teacher marking hourly, daily, weekly, monthly, annually, recording results, finding averages, and copying them on report cards to be sent home! Does she not resemble the kornak on the elephant's back, pricking and stabbing the poor beast to make him hurry up? There is too much disregard for the dignity of the child exhibited in the schools of our country, which cries for redress.

I have come to distrust a teacher who practises marking the pupils' exercises; and in all my many years of experience I have discovered, in the end, that this distrust is well founded. He is invariably a person who finds it too laborious to acquaint himself with, and obey, the laws of psychology; and who considers the position of a slave-driver more pleasant than that of a gardener of children, who knows that education is a growth.

And now you, my dear young lady, will ask, and I should consider you a poor logician if you did not ask: "I understand you, then, to mean, that, from the very start in the earliest primary grades, the marking should be abandoned. But what would you

do in higher grades, where the marking and grading have become a custom? Would you suddenly abandon it there too?" A simile may answer you.

In a sanitarium for inebriates, which I visited last year, I found this practice in vogue: Every inmate owned a bottle, which the physician had in charge. Every morning the bottle was filled with choice liquor, and whenever the patient desired a drink during the day, he went to the office, asked for his bottle (which was labelled with his name), and took his drink under the eyes of his medical adviser. But before he handed it back a pebble was thrown into the bottle, which decreased the capacity of the bottle by just the size of the pebble. I was told that when the bottle is filled with pebbles the patient is usually *cured* of his immoderate love for drink. Hand in hand with this slow but sure decrease of the quantity of liquor goes an increase of strength gained by suitable treatment, such as physical exertion, excellent, nutritious food, elevating conversation and occupation.

This should show you the way out of the dilemma, my friend. Slowly, and with true conservative spirit, decrease the use of marks and grades. Let them slowly sink into disregard. Do not be hasty about it. Meanwhile make your teaching as interesting as you can possibly make it. Pay due regard to the individual tastes of your pupils, and your school will inevitably become what it ought to be, — a garden, not a penitentiary.

SEVENTH LETTER.

TEACHERS' EXAMINATIONS.

My interesting Young Friend, — It is a pleasure to correspond with you, and I am very sorry that you forbid me to quote you because you fear to be detected. Fear not. If yours had been the only case in which my discretion had been appealed to, I might, perhaps, be found wanting; but you know I am in the years of advanced principles, — as was said of the old maid, when the poet's politeness would not allow him to admit that she was old, — and with age discretion develops wonderfully.

I understand, then, that your certificate runs out, and that in order to secure a new one you must subject yourself to an examination. But I understand, also, that you do not fear the ordeal, having prepared yourself thoroughly. Yet you are not without some misgivings; I fully understand that. Indeed, I should have them too: I have a vivid remembrance of some of the many occasions on which I trembled in my boots, for I am a much-examined man. Nor do I blame you for feeling uneasy at the approaching examination, for teachers' examinations in this country are very much of a lottery. They are as different from teachers' examinations in Germany, as a game of keno is from a game of chess.

What is the certificate to signify? Certainly, the ability to teach, and a documentary proof of the fact

that you possess the necessary amount of knowledge. But ask yourself, Is the certificate which you now hold a documentary proof of your ability to teach? You may say, "Yes, because it distinctly states, in black on white, that I have the requisite knowledge, and am therefore entitled to accept an appointment. Does not that mean I am able to teach?" No, my young friend, it does not. It merely means that you have the necessary amount of knowledge which you would need in case you were called upon to teach; but it does not convey the idea that you have the ability to teach. Knowing is one thing, and being able to do is another. Knowing the multiplication-table does not carry with it the ability to teach it. Knowing how to analyze a sentence does not carry with it the ability to teach grammar and language. And even if it did, it would not make a disciplinarian of you.

See what the law-students have to do. They go through a practical course in a lawyer's office. They go into court, and listen to the arguments and practices of full-fledged lawyers. They note the decisions of the judges. They copy briefs and other documents, and try their hand at composing them for the inspection of their masters. Then after several years of practical work of that kind, and after having acquired the necessary routine and amount of knowledge of the law, they present themselves before the board of examiners, and there are subjected to an oral as well as written examination. When they are admitted to the bar, they have acquired not only the desired amount of knowl-

edge, but also a skill in applying it. Now, when you went before the board of examiners for the first time, you had no skill in teaching; you came fresh from the seminary, and had to give proofs of your knowledge, but not of your skill in applying it. At present, after two years' experience, you have acquired a great deal of skill, and, perhaps, lost some of that vast (?) amount of dry knowledge.

Now see what the physicians do. The case is similar to that of the lawyers. Students of medicine have to attend the clinic. They are obliged to accompany the attending physician upon his rounds through the hospital. They are asked to prescribe, and to state what they would do in this or that case; in fine, are prepared in the only practical and successful way to become good physicians, — namely, in accordance with the well-known proverb, "Practice makes the master."

I remember the examination I had to pass in Prussia. It was an ordeal, and there was no sham about it, real or otherwise. For several days we "aspirants" were examined orally in all the branches the course of study prescribed. This was done very searchingly. Then followed a day of written examinations, on which three dissertations had to be furnished. After that followed several days of teaching. Every candidate (aspirant) was assigned a lesson. To my lot fell the geography lesson, one in mental arithmetic, and one in singing. It is true, the lessons were short; but it does not take long for any rational examiner to see whether a person has the ability to handle a class and teach lucidly.

Let me acknowledge that at that ordeal I quaked; but much depended upon it, and therefore I conquered myself.

As a matter of self-evidence the examiners did not mark us on a scale of one hundred. Their marks were as follows: very good, good, mediocre, poor, very poor. As a proof of the thoroughness with which the examination was held, I will betray the fact, that one of the young men, whom we considered the best of the students, a walking cyclopædia, failed in the lessons which he had to give, and a certificate was denied him. Another who had given excellent lessons, and who was certainly a born teacher, failed in passing, because he could not solve the Pythagorean problem. All this may seem strange to you; but when I compare our county teachers' examinations here in Ohio with the examinations held in Germany, I cannot help but wish that a revival would take place on this side of the Atlantic.

Here only a written examination is required upon ten matter-of-fact questions in each branch, — questions as narrow as a razor; such as, "Where was the convention held that nominated Hayes for the presidency?" This question is not a fictitious one; yet when a person has been successful in this written examination upon questions that are as remote from the young teacher's actual duties in the schoolroom as the moon from the earth, she is awarded a certificate which says in substance that Miss or Mr. So-and-so is entitled to teach for one, two, three, or five years, as the case may be,

implying therewith that she or he has the ability to teach. It is a terrible outrage, and one that has been the source of much mischief.

A manufacturer does not ask an applicant for work whether he knows the names of certain tools and other things, but whether he can work with them. When I want a good shoemaker, I do not ask him whether he has knowledge of political economy, but whether he can make a shoe; and the test to which I would subject him would be a very practical one. But strange beyond comprehension it is, that this practical nation, this nation of common-sense, should be so short-sighted as to test applicants for teaching only in regard to the quantity of knowledge they possess, and not with reference to their skill in applying it.

EIGHTH LETTER.

RAPIDITY IN RECITATION.

My happy Young Friend, — Do not hesitate in giving utterance to a question like your last one. It is of more weight than it may seem to you. You ask, "Am I right in insisting upon the utmost swiftness in answering to the call for reciting?" I should say Yes, if you expect the answer to be a recital; but I should emphatically say No, if the answer is not to consist of something which has been memorized.

You see, as to quickness in answering the teacher's questions, or (to use a more technical term) as to rapidity in conducting recitations, I hold a somewhat

different opinion from that so frequently advocated in educational periodicals. This is said with due respect for the conviction of others, and the arguments they present. Let us first ask, What is a recitation? It is, and, in the true sense of the word, can be, nothing else than a "verbal repetition of something learned or committed to memory" (Webster). Now, then, I grant willingly, that in a case where something is, or has been, learned by heart, this swiftness in answering the call for recital is proper, judicious, and profitable. It causes not only a skill in making use of these intellectual tools in an exact manner, but also assurance and self-reliance in the pupil.

But the next question will be, How far is this memorizing by rote to go? Or, what is to be learned by heart, so that it be "recited"? Why, multiplication-tables, and a few other things which are of insignificance in comparison with the vast amount of conversation between teacher and pupils which cannot be called, and should never be, a "reciting." A more advanced opinion is, that the results of teaching which will last beyond the school years are acquired in a different way: I mean, by comprehending facts, turning them this way and that way, and by constantly applying them in different ways and forms. All this needs time, needs thought, or rather the act of thinking, and in some cases even a moment's investigation by means of the senses on the part of the pupils. Almost every good thought is produced slowly; it has to be stripped of all the many fetters that seem to

keep it tied down; and, that done, it needs must be dressed in good language, *négligé* not being admissible.

Will not the tendency to brilliant, rapid recital lead us back to the antiquated method of teaching, which had the enviable quality of not being a method at all? Will not this brilliant, rapid recital kill the thoroughness advocated by pedagogical classics, with which they showed us how to unfold, to unveil, to develop the mind? It may be stated, in order to strengthen the argument, that, as far as instruction goes, the mind is the principal thing; not grammar, reading, arithmetic, geography, botany, or physics, etc. The latter are means, not ends, of education; the ends are to strengthen the inborn powers of the children, of which memory is only one, and by no means the most important.

Let the pupils forget the many details of these branches after they leave school; their minds will have grown, and if the many details which we would allow the pupil to forget are obtained in the right way, and not merely learned by the tongue, they will not be lost after all. Riches thrown into our lap will soon diminish, and be squandered; but what we have earned by hard labor, and saved under sacrifices, to that we cling, and it clings to us. A kind of teaching which resembles this hard labor, by which the child's wits are brought to work, will, as may safely be affirmed, admit of no such rapid "recital" as is so frequently advocated.

Nor are, in my opinion, the brilliant pupils (those

who show off in a "recitation") the ones that make strong men and women. Nay, I am led to think that the apparently dull ones win the laurels over the former. Here is an example: I know a gentleman who would be considered a rather poor pupil, if he sat among school-children, as far as this rapidity is concerned. Whatever he says, he says with hesitation, constantly weighing his sentiments; his words sometimes follow each other so slowly, that he resembles the miser who turns the penny in his hand several times before he gives it away. But see how precise he is in his statements; see the absolute truth in them; see the logic underlying them! That man is a deeper thinker than scores of others; he has a clearer insight into every thing his mind ever approached; and, what is bearing upon the question under discussion, he has learned more, by grasping slowly, than a great many others who grasp quickly and forget quickly.

Are we not, in our tendency to rapidity in teaching, falling into the same fault that is attributed to the whole nation, — fastness, superficiality? Have we not too much of that skimming reading, superficial thinking, and blind following of authority, in this country? Are we not increasing it? Do not, my dear young lady, regard these questions as conclusive arguments, but take them for what they are meant, — inquiries of a troubled mind, that wishes for deliverance from the painful sensation of hurrying open-eyed into danger.

It seems to me there is a physical danger in this rapidity of conversation, also (I am "at loggerheads"

with the term "recitation"), in school. This danger consists in wearing out teachers and pupils. I know a vigorous, active, and in fact (to use a slang term) dashing teacher. Whenever I see her teach, I perceive that her nerves are so active that her finger-tips seem ready to dance fandango. May I not attribute the weariness and lassitude of the children to the fact that they are literally worn out when school is out? They cannot do work at home. Is not the absence of this mad rapidity the reason why pupils in Germany can be called upon to do a liberal share of their school-work at home? I merely strew this in as a suggestion. Perhaps I am wrong. And now a *simile.*

A schoolroom with a teacher who strives for, and obtains, rapidity in teaching, resembles a hot-house. Every plant in it is beautiful to look at; they all show off in dazzling colors of all kinds. If the children could remain in that schoolroom, it would be a good thing for — the schoolroom.

But see the plants droop if you place them in another ground, in another air, in other surroundings. The brilliancy vanishes, the blossoms and leaves soon drop, and the real valuable parts of the plants, the stems and branches, the root and germ of life, are preserved: they possess what will keep the plant alive; they adapt themselves to the new surroundings; they go through the process of acclimatization. So with the pupils. What has become part of their very selves, what has taken root in their minds, and what

has been slowly gathered by the memory after it went through the mill of reason, and comprehension, that — But why picture a thing which is self-evident, and not disputed?

NINTH LETTER.

CONTINUITY OF INSTRUCTION.

My dear Young Friend, — Permit me to quote from your letter: "When addressing our Teachers' Institute on the subject of 'Principles of Method,' you mentioned one which I failed to understand. First, you dwelt upon the necessity of starting with sense-perception; and my own experience furnished me with abundant evidence of its truth. Then you emphasized that symbols should follow, not precede, objects; and your explanation of this principle was as lucid as your illustrations were impressive and convincing. But your third principle, '*Instruction must be continuous*,' remained obscure to me. May I ask you to explain it in the 'American Teacher,' a journal which offers the benefits of a normal school to us?" — Yes, with pleasure.

The easiest way to satisfy you would be to send you to Webster, who defines continuity as being an uninterrupted connection, a close union of parts, a cohesion. "*Law of continuity* (*Math. and Physics*), the principle that nothing passes from one state to another without passing through all the intermediate states." Or, I might interpret by saying that progress in school (and progress here implies that of

teaching as well as of learning) should be a step-by-step movement; that there should be no break in the procedure which might cause disturbance. But that would not be sufficient. There is still a vagueness about these definitions.

Let me say, then: By continuity of instruction I mean, that the matter of instruction should be given in genetic order. I mean that immovable and perpetual order established since the creation of the universe, which in philosophy is called the law of continuity, in virtue of which every thing that is done is done by degrees infinitely small. It seems to be the dictate of good sense, that no change is made by means of leaps. *Natura non operatur per saltum* (nature does not operate in leaps); and nothing in nature's own unhurried manner of growth can pass from one extreme to another, without passing through all the intermediate degrees.

Now, what is true of nature's growth must hold good of the mind; man existing not outside of, but within nature, being part of nature. So, then, all the items of each branch of study should be so presented that they form a genetic order. Furthermore, all the different branches of study should have an organic connection with each other. And here come in the art and skill of the teacher, which no organization, be it ever so wise, no text-book, be it ever so excellent, can replace. There must be a continuous adaptation, in fact, which mere text-book slaves cannot practice, even though they understand it.

Thus, for instance, it would seem wise to choose the examples used in grammar from the material gained in other studies, as geography, history, arithmetic, as well as literature. In other words, we should feed our instruction in language from the material the child has at hand. In spelling, we should use new words which the child meets in all branches of study, and not only from a spelling-book, the contents of which are in no organic connection with the child's thought-material. In arithmetic, we should use problems taken from the child's home-experience, or such as afford an organic connection with the child's range of thought. In short, genetic order in each study, and organic connection between the different studies, will cause continuity of thought, which is a condition of mental growth, and therefore a condition of success in teaching.

There certainly can be no doubt as to the desirability of connecting, logically and organically, all the matter of instruction, so that erratic leaping between distant points be avoided. But, my friend, that is but half the principle. So far, my explanations had reference to continuity in the *matter* of instruction only. The continuity of the child's *mind* is of even greater importance. If the child is not prepared to take the next step in an otherwise genetic train of thought, you will not be able to lift him up to it, since he must *grow* up to it. If he is not prepared to comprehend the next thought, you cannot ingraft it upon his mind, since the mind must develop thought within.

A thought, be it indigenous or not, cannot spring into life, or enter the child's mind, as a complete, finished thing. It necessitates the action of thinking not only of this one thought, but of several others which lead up to it. If I make any one a present of a dollar, which I may have earned by hard toil and labor, it requires no toil and labor on his part to take it, and enjoy its use. But I cannot give him a thought, without making him earn it; that is, not without requiring him to go through the effort of thinking like myself, which will be impossible if the conditions are not the same in both minds.

The "natural" method of teaching derives its name from the fact that it is in harmony with the laws of natural growth, expansion, development. Continuity of instruction refers to the progressing activity of the learner. He is to be led in such a manner, that he will not be obliged to make unnatural leaps, but will make steps according to the size of his own legs; that is, his progress will be measured accurately by the capacity of his comprehension. A train of thought which may seem unbroken to an adult is, perhaps, not so to a child. How often have I heard teachers say, "Can't you see that yet? Haven't I made that clear enough yet?"

You may easily see, that, buying an article for ten cents, and intending to make a gain of twenty per cent, you would have to sell it for twelve cents. But a child will, necessarily, walk slowly before he comes to the same conclusion. There are many links be-

tween the first elementary idea of percentage, and the child's ability to see, as readily as the merchant does, what price must be put on the article to make a gain of twenty per cent. It cannot be urged too strongly, that the principle of continuity has to be applied both to the matter of instruction, and to the mind of the learner. The different degrees of comprehension among the pupils necessitate a constant adaptation of the matter to the mind, and in this the teacher's skill is tested.

I know, my young friend, that this is any thing but an amusing letter; but the subject it treats of does not admit of humor. A few words on "text-books" may close this letter. — Genetic and logical order is preserved, nay, highly cultivated, in our modern text-books; but while each offers that order and development within its own range, it rejects, as it were, a connection with other branches of study. I have in mind the many books on grammar, that present the subject cut loose from all other, even kindred, subjects, such as composition and literature. The same holds good in text-books of geography, history, arithmetic, etc.

Each book illustrates the continuity in the *matter* of instruction, which, of course, is one of its chief merits, a *conditio sine qua non.* But the books, of necessity, leave out of consideration the continuity of the child's *mind*, and therefore must be handled by a teacher who understands the child as well as his subject. The text-book must be again degraded to

its proper position, to that of a *means* of instruction. It cannot, and should not, replace the teacher, who alone can make the proper selection, with reference to the actual state of mind of his pupils. He alone can know what questions to ask, what matter to present, and in what manner to present it.

The value of text-books has been over-rated. It may be unpleasant to hear it, but it must be said. In the same proportion in which the text-books grew better, the teachers grew worse. I think I can see a complete chain of cause and effect in this. Others say: In the same proportion in which good but poorly paid teachers stepped out of the profession, and were replaced by poorly prepared teachers, — in the same proportion the text-books, of necessity, grew better. I accept this as a more charitable explanation; but wish to emphasize again, that the best text-book cannot replace the good teacher, because it disregards the continuity of the mind by presupposing all minds alike. It cannot perform the functions of the good teacher, who, by continuous adaptation, fits the matter of instruction to the capacity of the learner's comprehension.

TENTH LETTER.

WHY TAKE THE TROUBLE?

My despondent Young Friend, — Your letter is not as cheerful as your letters usually are. You say, you have been disappointed by not being promoted

as you had expected, and that you asked yourself why you should take the trouble of studying constantly and trying to improve yourself, when that improvement has no market value? It is a serious case indeed, and should be treated with sympathy and encouragement. Knowing that you can approach any question calmly and impartially, I will ask you to look at this one from a higher point of view than your own personal grievance will permit. Let me quote a passage from a recent writer: —

"It is an undeniable fact, that upon all domains of practical life, as well as in science, *division of labor* has become a necessity. And no one will deny that to this division of efforts may be traced back many grand performances of our times. But we are also aware, that the mechanic often sinks to the level of the machine, and becomes a mere mechanical worker, in consequence of this division of labor. And so there is imminent danger, that in the realm of thought and mental labor those who are chiefly occupied with subordinate specialties will lose their comprehension of the whole, — will not see the great aim of that of which their specialty is a mere trifling part."

The whole embraces the particular, and the latter derives its value from the former. The judgment of the specialist is easily prejudiced, and becomes warped. His line of argument is defective, not unfrequently totally faulty; and the boundaries of his horizon are often congruent with the narrow boundaries of his native city or village.

Nothing is more dangerous, in science, than spinning one's self into a cocoon of small and smaller circles of thought, and the miserable cry, "Do not disturb my circles!" when one approaches these narrow minds with demands of a loftier nature. Science can be kept young, can be constantly rejuvenated, if its disciples will, by way of inductive reasoning, rise from the particular to the general, and go back, by way of deduction, from the general to the particular.

If any one should be conscious of this, it is the teacher. If he satisfies himself with doing his duty within the four walls of his schoolroom, he will soon degrade his art to a mere handicraft. No science deserves to be called "associating science" more than our professional science "pedagogy." It is said, that he who thinks about education thinks about every thing. And if we consider this in the true sense in which it is meant, there can be no presumption in it.

If you, my young friend, are placed in charge of the a-b-c-darians, you should at least know the course of study of the whole range of grades following. But at whatever stage in the curriculum of a school, fate may place you, you should distinctly understand the connection between school and life, and the relations between school and home. You should, at every step, know the true end and aim of education; and be constantly, aware, that, whatever apparently trifling thing you are teaching, it must, like every other part of school education, have its bearings upon the future destiny of the child. I say this, because it is a world-

wide fallacy to think little is necessary to teach the young budding mind.

I remind you of the Jesuits, whose schools, though built on totally different principles, and aiming at totally different objects, were noted for more than one hundred years for their wonderful results. The Jesuits placed young teachers, beginners in the profession, in middle and high grades of school, and promoted them downward according to their degree of proficiency and excellence. If this proves any thing, it proves that these shrewd, though in more than one regard despicable, men knew the value of elementary education. It is an erroneous opinion that needs be fought, namely, that *any* teacher is good enough for the beginners. The best one is barely good enough for the youngest pupils.

That, however, I trust, you know full well. What I mean to emphasize is, that you should foster an impatience with yourself, so that you will not sink into that self-satisfaction which is the arch-foe of all real progress. Practice in the schoolroom is very apt to make you self-satisfied; and if you do not earnestly strive forward and upward, you will, in the course of a few short years, have a lamentably small horizon of thought and vision. This danger is less imminent where you are called upon to teach a variety of subjects; it is greatest if you are to be a specialist.

Now, you do not and can not foresee where fate may place you, and what duties may fall to your share; but that much you do or ought to know: that if in a

few years your teachers and colleagues ask, "What has become of her?" the answer comes, "Lost to the cause, crushed by the machine, swept away into a forgotten corner, heard of no more," — I say, you know, that, if this be said of you, it is your own fault. The vicissitudes of life may knock you about, fate may deal hard with you; but I implore you to keep fresh within your heart and mind the source of rejuvenation, so that you be not dead to the profession, — so that no monument in the heart of your teachers be erected, bearing the inscription, "Sacred to the memory of one who lost all that was valuable in her, — to wit, herself."

Perhaps the hardest struggles, the fiercest battles which you will have to go through, will have to be fought with yourself. What the poet says is true, "*Vor die Tugend haben die Götter den Schweiss gesetzt.*" (Before virtue, the gods have placed perspiration.)

You may have been overlooked unintentionally by your authorities, or you may have been retained in your present position because you are best fitted for the pupils now under your charge. However this may be, do not show resentment, not even disappointment; and you will disarm any evil will on the part of those in authority over you, and arouse a sympathy which will bear high interest at a future occasion. But best of all, keep up your studies, never waver in your devotion to duty, and in your hope for better things to come, and higher, nobler aims to attain.

Let me express the hope, that when your life's course

runs out, it may be said of you, that which the poet expresses of a great man: "The warm impulse he gave shall resist the empire of decay. He will live among us, and live when time is over and worlds have passed away. Cold in the dust the perished *heart* may lie, *but that which warmed it once shall never die.*"

CHAPTER II.

FROM THE EXPERIENCE OF A SUPERVISOR.

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A PERTINENT QUESTION ANSWERED.

THE following correspondence will explain itself: —

I. INQUIRY.

CANTON, O., Dec. 11, 1886.

DEAR SIR, — It is a general complaint, that very few young men graduate from our public high schools, — very few in comparison with the number of young ladies who graduate. It is believed that the proportion is not above one to four throughout the State of Ohio. Demand for explanation is usually met by a statement that the worldly circumstances of parents require the personal services and earnings of their boys at an early age. But the fact is, that very few of the sons of professional men, merchants, and others in favorable and easy circumstances, remain to graduate; while the sons of poor men frequently *do* graduate. Inquiry among parents whose boys have left school before graduation leads to the belief, that in most cases the discontinuance has been against the wishes of the parents, and notwithstanding their earnest desire that their sons should remain and finish the course of study. The

worldly circumstances of the parents cannot be relied on as the true reason for this condition of affairs.

Another reason has been given. It is, that boys from ten to fourteen years of age have taken an aversion to school and school-work from the sting of ignominy inflicted on them by cruel corporal punishments administered by their teachers. It is believed by some, who have given the subject thought, that great harm is being done to our educational system by the excessive corporal punishments on boys in school; that the custom is an evil one, and has an inherent tendency to abuse; that by its practice the teachers become cruel and heartless, and the boys sullen and revengeful; that it breaks down their self-respect, stultifies their budding manhood, and makes the school where it is inflicted distasteful, if not hateful, to them, and they seek every excuse to be free from its disgraceful thraldom.

Has this thought ever occurred to you in connection with your school-work? You are aware that, as men, we consider a blow a deep indignity. One of the marked distinctions, for centuries, between freemen and slaves, has been that a freeman may not be beaten as a punishment. The more refined and advanced the state of civilization, the deeper and more humiliating the sense of indignity felt from the infliction of blows. May not our boys have feelings and sentiments akin to our own? Nay, may it not be that many parents, sympathizing with the developing manhood of their boys, withdraw them from schools where cruel corporal

punishments are tolerated? A desire for education may be very strong in the human mind, but it is not a moving instinct like the desire to satisfy hunger. Wild animals will seek places where food is abundant; but they will shun, if they starve, places where they know there is personal danger, though food may there be ever so abundant and desirable. Are our boys driven from school before graduation by the ignominy, or the dread of the ignominy, of personal violence at the hands of their teachers?

May I hope that this subject will receive your careful consideration, and that I may have, at the earliest practical moment, your views as fully as possible? Awaiting which, I am

Very respectfully yours,

JAMES J. CLARK,

Member of Canton School Board.

II. REPLY.

HAMILTON, O., Dec. 15, 1886.

DEAR SIR, — In answer to your courteous letter of inquiry, I wish to state that the fact, the causes of which you desire to investigate, is admitted. Though we find that the number of graduates among the boys as compared with that of the girls in our city is more than one-third, this does not materially alter the aspect of the case. I agree with you, that the argument concerning the worldly circumstances of parents is not satisfactory, inasmuch as it is not up-

held by facts in such number as to make them of sufficient weight. Again, I agree that the abridgment of the courses by voluntary "quituation" is hardly ever in accord with the parents' desire. Certainly, there must be other reasons for the undue proportion of female graduates over male graduates.

You attribute the above fact to the toleration, or, let me say, to the application, of cruel corporal punishment at the hands of the teachers upon the boys from ten to fourteen years of age. You reason well; and I agree that this explains, if not many, certainly some, cases of early withdrawal from school; but permit me to say, in all candor, that you are playing on a harp with but one string. In the first place, corporal punishment is not prevalent enough, so far as my extended experience goes, to be so potent a factor in the case under discussion. Moreover, boys who manage to get cruelly beaten (I am speaking advisedly, and, as I believe, with the proper choice of terms) are of a type who generally never enter a high school, and certainly never graduate. But, sir, your argument as to the degrading influence of corporal punishment, both upon pupils and teachers, is heartily commended.

Personally, and in my official capacity, I regard only two offences properly punishable by corporal punishment. According to the just rule, that punishment should be in strict accordance with the offence, I believe corporal punishment in place, (1) where a flagrant case of cruelty, either to animals or human beings, is to be dealt with, because bodily pain is the proper

remedy in that case; and (2) in the case of open and violent resistance to authority, for we must not forget that the school is not a republic, and that the teacher is to be queen of the hive or governor of the class. For every other offence, be it against truth, order, honesty, decency, or whatever else, corporal punishment is improper. Moreover, since it acts like opium, if indulged in a few times, causing a craving for more, teachers become accustomed to it, and make its application a habit.

Whether my limitations of corporal punishment, as stated, find approval or not, this will certainly be granted by every right-thinking person: namely, that, the less of corporal punishment that is inflicted, the higher will be the type of the school, morally and intellectually; also, that in some cases, as you most convincingly state it, boys are driven from school before graduation by the ignominy of personal violence at the hands of the teacher, and even by the dread of such ignominy.

Permit me to recapitulate. First, I grant, that, in a few cases, the worldly circumstances cause an early withdrawal of the boys from school; second, that, in a greater number of cases, the application of corporal punishment has the same effect. But that *does not adequately explain the great falling-off* in the number of boys who try to acquire a higher education. The following causes will, in my judgment, explain the fact under discussion, better than the two contained in your letter of inquiry.

I. I remind you, dear sir, of the fact that in this country manifold opportunities are offered to boys at an early age, to earn, if not a livelihood, certainly a considerable amount of pocket-money. This is a temptation which is not held out in many European countries, — a temptation to which many a tolerably good boy in this country succumbs.

II. I remind you of this other fact, — that the too prevalent worship of the self-made man, in this country, deplorable though it be, tempts the boy to despise, as his father possibly may, systematic higher education, and to try to carve out his own future without it. In ninety-nine cases out of a hundred, such a boy fails and speedily sinks to the bottom; never reaches the fame of the great self-made man who was his ideal, and is finally found on a level with men of whom thirteen do not even make a dozen. But the fact remains, that it is a great temptation. College-bred men are too often quoted below par, in this country. The river cannot rise higher than its source. Why should the boy think higher education necessary, or even desirable, when at the fireside, in the press, from the pulpit or the lecture-rostrum, on the stump, at the bar, — in fact, everywhere, — the fame of the self-made man is proclaimed?

III. Permit me to call your attention to a third fact, not always known, and where known not infrequently denied, for reasons too obvious to mention. It is this: that the course of study, the methods of teaching, and the mode of training, in the higher

grades of the grammar school, as well as in the high schools, are designed for, and shaped according to, the needs and wants of the girls, and not the boys. While I grant, readily and cheerfully, that the girls have the right to the same amount of education that the boys claim, and which it is our solemn duty to grant to them, I claim, most emphatically that the two sexes from twelve years of age and upward need a different training. I cannot go into details, but I should covet an opportunity to do so. Suffice it to say, that we measure the steps in our instruction, and the methods of our procedure, by the peculiar combination of faculties in the girls, just as a father measures his steps by those of his child whom he takes out walking. There is a strong desire in the average boy for exertion and application of his powers, which is not complied with, at this age, in the schools as they now are. He is repressed, and made to progress as the girls do. He sits side by side with them; they are held up to him as examples, whose frailty he, in his physical robust nature, despises. Moreover, in many cases he has not even a male example in his teacher. If he is a weak character, he becomes effeminate. If he is a strong character, he is soon filled with disgust, and quits school to find a better opportunity for the exertion of those powers which find no satisfaction in a girls' school. I know, dear sir, this will be considered rank heresy among many educational leaders in this country; but it is my conviction, and I have the courage of my conviction to

utter it. Do not be deceived by the flimsy argument that the girls are making more rapid progress than the boys. They are merely passive recipients of knowledge; while a boy can argue himself into knowledge, when he has a male teacher who is ready to indulge him in that. The very presence of girls, however, debars him from such a course in a girls' school, for that is what most of our high schools are. Where boys and girls are separated in different buildings, usually a greater number of boys graduate annually. This confirms the position just taken.

IV. As I stated above, the undue proportion of female teachers over male teachers is to be counted in when we look for the early withdrawal from school on the part of the boys. Boys at the critical age of fourteen to eighteen must have examples of manliness, of man's thoughts, of man's way of acting, of man's motives, of man's will-power and general conduct; and, instinctively feeling this, they seek it outside of school. But I have sufficiently emphasized this under the last head, and will not dwell upon it further.

Pardon the length of this reply; but of what the heart is full, the mouth floweth over.

Yours very respectfully,

L. R. KLEMM,

Supt. of Public Schools.

THE MEDICAL PRACTICE OF A TEACHER.

I. A WEAK SPELLER.

A SUPERINTENDENT, or, for that matter, every teacher, is more or less a physician of diseased minds, and ought to be able to give an account of cures he has effected, or a diagnosis of cases he has treated. In the following series of short articles, I will endeavor to describe a few cases which came under my observation, and which, as I cannot but say with pride, are in a fair way to recover even if not entirely cured.

MISS A. — "There is a boy among my pupils who is an excellent arithmetician, gets up good lessons in geography and history, is alive to the niceties of expression, that is, is careful in the selection of his words, and construes his sentences well; but is an indifferent reader, and a most wretched, abominable speller. What do you think, Mr. K., ought to be done in this case?"

What remedies have you tried?

MISS A. — "I have pinned him down to his spelling-book till his eyes began to wander. I have appealed to his sense of duty, which is very keen; but I saw that made matters worse, because it overtaxed his limited ability. Then I appealed to his ambition; which proved to be perfect poison, for now the boy would try to master long strings of words, and

thereby weaken his memory more than ever. Can you suggest any thing better?"

I suspect, my dear Miss A., that you have not inquired into the causes of this disease; and I am sure, had you done so, you would have employed a totally different mode of treatment. Can you imagine the cause?

Miss A. — "No, I haven't the most remote idea, unless it be want of attention or application at a former stage of his school career."

No, I think we shall have to look elsewhere for the cause. Let me ask you to show him a rose-leaf or a clover-leaf, and then tell him to sketch it. Write a single word, such as "breakfast," on the board; let him see it, and then observe how correctly or incorrectly he reproduces it from memory. Try him also in describing some object accurately. Please try these things first, and tell me to-morrow the result of your observations.

(*Next day.*) Miss A. — "Why, he could not sketch the leaf, nor reproduce the word correctly, nor, in fact, could he describe a simple thing with any degree of accuracy."

And what do you infer from these facts?

Miss A. — "I should say his sense of form is wofully neglected."

Very good, my dear young lady. That is the whole argument in a nutshell. Now go further: Having no sense of form, he cannot have a memory for forms, just as little as a person who never in his life heard

a sound can have a memory for sounds. He has a memory for numbers and their relations, for historical, geographical, and other facts; but his form-sense is weak. Every word has its physiognomy, and spelling should therefore be learned by means of the sense of sight chiefly.

Now for the remedy. Feed him on a diet of one, or, at best, a few words, for a few days; use easy, common words, such as occur in his own vocabulary, and let him see them on the board, on paper, in print, in writing, etc. Set him to finding them ten times in his reader, and to copying them till he is perfectly familiar with them. Make him analyze, that is, split the words orally, write them from dictation, and use them in sentences of his own.

Do this with a very limited number of words: in short, give him babies' diet, till his form-sense, and memory for word-pictures, are sufficiently strong to digest more. At the beginning, it may be painfully wearisome to you and to the boy, but the success which is sure to follow your endeavors will strengthen you both. You will find, also, that he improves in reading. Constant repetition, of course, is necessary for some time, until the boy has acquired the habit of "making personal acquaintance" with words.

Somewhere in the earlier stages of his school-life his perception of word-forms was neglected, and left without stimulus; or, perhaps, it was overworked, and thereby weakened.

Well, the boy, according to latest reports, is on the

way to recovery. He draws well now, and his compositions are, if not faultless, certainly fair specimens of orthography for a pupil of his age.

II. THE RESCUE OF A DUNCE.

The following sketch may show that the teacher can undo much mischief caused by wrong treatment or want of natural aptitude.

Miss C. — "Well, Hugo is a dunce, if ever there was one! He is wretched in every branch of study, sits there like a log, and apparently has no interest in any thing going on in school. His progress is of the slowest kind, and I suspect he was sent to my room because he was too old to stay in Miss W.'s room any longer. I wish you would suggest a remedy in this case, Mr. K."

What are his home surroundings?

Miss C. — "They are not elevating, to say the least. I know from hearsay, that Hugo is pushed and knocked about, scolded constantly, and even whipped mercilessly, by parents who do not understand the boy's absolute want of perception."

Are you sure, Miss C., that the boy's apathy is the result of defective perceptive faculty?

Miss C. — "I am, so far as it relates to school work. I can amuse him royally by giving pictures into his hands. I even saw him smile over a simple outline sketch of a humorous scene. Come to my room, and watch him a while, will you?"

I did, giving instructions to the teacher not to

notice him or me. I seated myself near Hugo, took a slate and pencil, and began to draw outline sketches of things which might amuse him. Soon I saw him imitating me, and that with a dexterity and artistic skill which fairly took my breath away. I smiled at him encouragingly, entered into a whispered conversation with him concerning the pictures he drew, induced him to show me my mistakes in drawing, which he did readily and without assumption. Seeing in me a "hail fellow well met," he warmed and opened up his soul to me as he had perhaps never done in his life.

There was a rich and warm-hearted life under a crust of apparent apathy; and I was determined to awaken it, and reconcile it with its surroundings. We two adjourned to my office; and for a whole hour he conversed freely with me, showing no reserve, after seeing that I meant well. After reporting to Miss C. the substance and character of our conversation, she blanched, and cried out from the bottom of her troubled heart, "Have I misjudged the boy? Lord forgive me if I have!" (Bless her impulsive heart!)

Miss C. and myself agreed upon a plan for action with regard to the dunce, as Hugo had been called by everybody. For a number of weeks, we gave him the privilege of coming to the office whenever he felt like doing so. We gave him work to do, yes, but made all his work have relation to drawing. All his arithmetic was drawing and sketching, till slowly, but by perceptible degrees, his interest in other things was awakened.

One episode of his cure is very vividly imprinted in my memory. Hugo showed a decided dislike to reading. I argued with him, saying that some day, when he would be a great artist, he would wish to read what people said about him; he would want to read the criticisms made upon his work in the journals. Well, queer as it may seem, and questionable as the incentive may have been from a moral point of view, it is a fact, that from that day the boy bent all his energy upon reading, till after a few months he read as fluently as most of his schoolmates who were considered bright boys when he was "the dunce."

One thing I greatly disliked in him; namely, the way he revenged himself frequently. When other boys would use their fists freely, Hugo would rapidly draw a caricature of the person who he thought had intended to wrong him. Some of these caricatures are still in my possession, and I cannot but laugh when I come across them. There was such a fine vein of humor exhibited in these pictures, that I became easily reconciled with his mode of revenge. The boys soon feared Hugo's crayon more than they did his fists, and they "left him severely alone," or at least treated him gingerly, "right side up with care."

To cut a long story short, the boy is now a very creditable pupil, though by no means a shining light in scholarly attainments; he is fairly equipped for higher grades; and if in future years Hugo ——— should become a great painter, which is not at all impossible, some of his schoolmates may be proud

of having gone to school with him. Hugo has a very soft spot in his heart for Miss C. and myself, and I am happy over it.

III. A "BAD" BOY IN ARITHMETIC.

In the following article, another of the weaknesses frequently found among pupils is treated.

Miss B. — "I have a good mind to shake you, Fred! Don't you see that you made one error after another in the solution of this problem? You ought to be ashamed of yourself, to be so 'bad' in arithmetic, and good in every thing else."

I happened to hear this by no means uncommon speech, and became painfully aware of the fact that Fred, whom I had come to praise for his excellent work in map-drawing, needed a little extra attention. I inquired of the teacher afterward the particulars of the case. Here is her statement: —

Miss B. — "Well, Mr. K., I love that boy as the apple of my eye. You need not be astonished; I repeat, I love him. But I fear he is making use of my preference for him. There is no reason why he should be so slovenly in his work in arithmetic. He is not too stupid to reason out a problem, — no, that isn't it, — but he is negligent in the execution. Don't you think a dose of 'heroic treatment' might do him some good? Only don't make me give it to him, for I can't."

Let us look into the symptoms before we prescribe the remedy. What makes him so brilliant in history

and geography? What, do you think, is the reason of his spirited reading, or of his meritorious efforts in composition?

Miss B. — "Well, I suspect he has more talent in those directions."

Likely; but that would scarcely account for his slovenliness in figuring, for you say yourself he is not stupid in reasoning out a problem. And then, look at his work in map-drawing; see with what loving accuracy he has treated the difficult map of Europe. There is not a slovenly line on that whole map. Don't you think it is in another direction where we'll have to look for his evident carelessness in dealing with numbers?

Miss B. — "Indeed, you lead me to suspect that it is not so much want of talent as want of interest."

Very good; I believe you are right. Interest, you know, acts upon the learner as sunshine and moisture do upon the germs in the ground. Cannot we agree upon a remedy which will arouse that interest? Suppose that you try this: link the intense interest he manifests in geography and other branches, with arithmetic, by giving him problems containing geographical, historical, or statistical dates, or any thing that touches those fields of knowledge in which he is interested. Tell him that much depends upon accuracy in ciphering. I should be much astonished if he would not be very careful in the execution of his work. At least, let us try his preferences as levers.

Miss B. — "I verily believe that that will bring him around sooner than a shaking will."

And while we are about it, my friend, don't say a pupil is *bad* in this or that study: say he is weak. Apply the word "badness" to cases of immorality. A disobedient, a cruel, or an untruthful child may be called a bad child; but a poor reader, a faulty speller, or an inaccurate arithmetician may be a very good child in point of morals.

Miss B. took my words good-naturedly. The boy in question is now one of the most accurate and faultless arithmeticians in his class, a proof of the wonderful influence interest manifests, be that interest in the teacher, or matter of instruction.

IV. A BOY "LIKE KASPAR HAUSER."

Miss D. — "Oh, Mr. K., I have a boy in my class who is a veritable Kaspar Hauser[1] when it comes to composition work. He hasn't an idea. Please to look over this paper."

I did. This was the production. "A sunrise. The sun rises and sets. I have often seen him set, but only once rise. I guess I must have been too sleepy to get up early enough. Since it is too long ago since I saw the sun rise, I cannot say any thing of how it looked, or whether it looks any different from the setting sun." Well, the spelling and penmanship are all right; that is one redeeming feature.

[1] We must request the reader to consult a history of education, to learn the purport of this expression. It will pay him well. Or, let him read Gutzkow's romance, "The Sons of Pestalozzi," in which Kaspar Hauser plays a leading part.

Miss D. — "Yes, I have no fault to find there; but think! this is a boy of fourteen years of age, and he is not able to say any thing of" —

What he does not know. Pardon me for the interruption; but, I should think, you set him too hard a task. Suppose, Miss D., I should ask you to write a composition on the "Trekshuit[1] as a means of transportation in Holland," what would you say?

Miss D. — "I am sure I should say, 'I can't do it,' never having seen a — what do you call it? — and not knowing whether it is a cart, a boat, or a balloon."

Why, yes, that is hitting the nail on the head. You expected the boy to say something of the tranquillity of the early morning, of dawn, of the first faint glimmer of light on the eastern horizon, of the awakening skylark, of the first brilliant rays shooting up to the zenith, etc., *ad nauseam;* and forgot that he knew nothing of these phenomena. An old German cook-book contains a curious recipe which begins: "In order to make *Hasenpfeffer* (ragout of rabbit), you must first catch your rabbit, then," etc. That's it precisely! The most necessary ingredient of a composition is a thought to work out. Where that is wanting, no composition can be made; though sauces and dips of all kinds may be employed, such a dish will remain without substance. A child who has something to say will say it. A child of experience and thoughts will

[1] Drag-boat. For explanation of this, see Oliver Optic's Dikes and Ditches, p. 333.

give utterance to them, though his linguistic talent be limited. So please furnish the rabbit.

Dr. Ed. Feldner, a member of the Saxon parliament during the German rebellion of 1848 (often proudly termed "the revolution of '48"), and afterward principal of a well-reputed seminary at Detroit, Mich., once told me the following instructive incident of his life, which I will here reproduce for the benefit of young teachers: —

"I was a boy fifteen years of age, and had won an enviable rank in school; only one thing fairly upset me. Once a month a subject for composition was given out, such as 'Thoughts of an Awakening Skylark,' or some such nonsensical trash. My report showed good marks in every thing, even in grammar; but in composition it said 'very poor.' My excellent father must have felt the cause of my failing in this particular, and when vacation began he gave me permission to make an excursion which might last several weeks. He furnished me with money, mapped out a route through the so-called Saxon Switzerland, and gave me a list of places at which I might stop over night.

"I was happy beyond expression, and readily promised to write as often as I felt like it. Oh, the bliss I enjoyed on that three-weeks' trip is still vividly imprinted upon the tablet of my memory! I wrote home almost daily, giving an accurate account of what I had seen, with whom I had fallen in on the way, what they had said, what thoughts had been awakened

in my mind at the sight of this or that phenomenon or scenery. I did this in the evening, before going to bed. One whole letter I filled with a vivid description of a combat I had with a vicious dog when I ascended to a hayloft which was to be my bedchamber that night.

"When I returned home, my father told me, with a touch of pride, 'Edward, I am glad you have improved in composition-writing.' — 'Now don't,' said I, 'you know I hate compositions.' — 'No, no, my boy; I mean what I say: every one of your letters is a capital composition, and deserves a high mark. I sent your letters to Professor W., and convinced him that you are any thing but a dunce in composition-writing. He acknowledged to me that he had misjudged you.'"

If this story has any moral, it is: First catch the rabbit.

DISCIPLINE.—A REFORMATORY CLASS.

[*From Annual Report to the Board of Education of Hamilton, O.*]

As a general thing, the discipline in the schools of smaller towns and villages is vastly better than in the schools of large cities. I was very pleasantly surprised when I came here, and noticed the well-mannered children, the pleasant, genial smile they had for their teachers, and the politeness they showed me wherever they met me. The order in the different schoolrooms and houses varies a little, as a matter of course, but is generally good without being oppres-

sive. If we inquire into the frequency of corporal punishment, and observe minutely, we see that very few cases of such punishment are found necessary. When it is resorted to, it is almost invariably administered to the same pupils. Teachers should understand that a request cheerfully uttered is always better than a stern command; and as a rule you will find, wherever and whenever you enter a schoolroom, that a cheerful teacher has a cheerful set of children busily at work or attentively listening. The exceptions to this are but few.

I abhor the death-like silence that is considered a result of good discipline in many schools all over the country. Life is motion, not rest. For this reason people who believe that in a school absolute quietude should reign, — a quietude in which a pin might be heard falling, — such people may find many a school sadly deficient in "discipline." People of common-sense, who know that life is motion, and that motion always causes some noise, will be well satisfied with what we consider good discipline. Col. Parker, of Quincy fame, once heard a guest whom he had conducted through his schools, remark, "But your classes are rather noisy." — "Of course," he replied: "our schools are work-shops, not funerals. Work always implies noise."

But while we have reason to be satisfied with the general order and discipline, and while we rejoice over the confidence and fidelity exhibited by the citizens of Hamilton toward our public schools, we must not be

blind to a fact which makes itself felt more and more disagreeably, as the school system grows. By far the greater majority of children come from homes in which the authority of the teacher is acknowledged and upheld. Only in rare cases I find a clashing of authority, as it were; not between teacher and parents, for in these cases the parents have lost all authority, but between the boys and the rules of the schools.

There is a small number of boys in our schools, and many outside of them, running the streets, who are unsafe companions for other children. I have investigated several cases by consulting the teachers and the parents. In every case, I found the reason of their bad conduct, in want of proper home-training; in weak or indulgent parents, who cannot govern the domineering habits and violent tempers of their children. These boys defy the rules and regulations of school, come or stay away as it pleases them, and generally behave as though they were the lords of the realm. It cannot be denied, that the street and home training of some boys is in crime, rather than in virtue; filthiness, rather than purity; and parents have a right to demand of the authorities who assume the education of their children, that they be shielded from the influence of such as these.

Now, the rules of the Board of Education concerning such black sheep are very well defined. We may *punish* these boys corporally; but it is always degrading the teacher and his school if corporal punishment is resorted to, and it is at best but a questionable

remedy. Or, we may, if punishment is of no avail, *expel* them. However, to expel them from school, and turn them upon the street, would be the worst remedy that could be conceived of. It would be simply swelling the number of dangerous elements in the community, whose decrease is one of the missionary objects of the public schools. Some of these boys, if not all, ought to be in the house of refuge, or on the Reform Farm; but commitment to these institutions is beyond the jurisdiction of the school authorities.

The only effectual remedy for cleansing our schools of these dangerous elements, and yet keeping them under our charge, is the establishment of an ungraded class, presided over by a teacher who is a strong disciplinarian, and who can exert a moral influence over the boys which will last beyond the school hours. To this class the boys might be committed temporarily, until they show such marked improvement that they give assurance of better conduct in future, and may be re-admitted to the ranks of their former associates.

One of the foremost educators of the country recommended the establishment of such a school in 1875. He then said, "This (reformatory) class should bear a title as little obnoxious as possible; but it should be designed for those whose influence is found to be pernicious to their associates, and who are incorrigible by those means of discipline which seem to be used in the schools at large. Its principal purpose is to guard the masses of children under the

care of the Board, from daily contact, in the class-room and on the play-ground, with children whose example tends to corrupt every one about them; to protect the young and the weak from those whose domineering habits or violent tempers make them unsafe companions."

It is often stated, and with just pride too, that the public schools are the crucible within which all the various nationalities of the community are fused into one homogeneous mass, alike in patriotic devotion and civil virtue. It is also stated, that the school is a state in miniature. If so, it is our solemn duty to shield the mass of children of law-abiding, virtuous parents, from contamination with vicious characters, just as the state authorities do, who single out criminals for the protection of society. Our rules here keep children out of school who are likely to bring with them, from home, the germs of a contagious disease. Why, then, should we be obliged to admit, among the mass of children, so-called moral lepers?

We have reason to think that such an ungraded class here in Hamilton will have about twenty to twenty-five pupils. No girl has ever been found to deserve commitment to such a reformatory. Permit me, gentlemen of the Board, to submit to your consideration the adoption of the following rules, which are in force in the schools of Cleveland: —

I. *Conditions of Admission.* — Whenever, on due inquiry and investigation, it shall appear to the principal of a school building, that the attendance of any pupil,

either by reason of incorrigibility or immoral conduct, is pernicious to the interest of the school of which he is a member, the principal shall refer the case in full to the superintendent, stating the reasons which may have led him to that conclusion; and at the same time he shall notify the parents of said reference to the superintendent. Thereupon the superintendent may, after a conference with the parents, transfer the said pupil to the "ungraded school;" but if objection to the transfer be made, on the part of the parent, the superintendent shall suspend the pupil.

II. *Return to Graded School.* — On sufficient evidence of good conduct, the superintendent may return a pupil thus assigned to the "ungraded school," back to the school from which he came, but not during the term in which he was sent.

III. *Studies.* — The studies in this school shall, so far as the number of classes will permit, be the same as are required by the course of study prescribed for the corresponding grades of the intermediate and primary departments; provided, that the branches essential to classification be not neglected. In all other particulars this school shall be governed by the rules as prescribed for the other schools of this city.

SCENES FROM SCHOOL-LIFE.

"I AM the maddest man you ever saw," said a man who came with a big club in his hand into my office one day. — "Oh, no, sir, you are by no means the maddest," said I; "I have seen madder men than you are.

You don't look like a brute, you have all the airs of a gentleman. But I suppose something very aggravating has happened, and that you seek my assistance." — "Then you are the superintendent, are you?" — "Yes, sir: be seated, and tell me what I can do for you." — "Well, the thing is this. The principal of this building whipped my boy, and I have pretty good reasons to think my boy did not deserve it." I held an investigation instantly; and very reliable testimony was brought out, revealing the fact that the boy had received his punishment for just cause. I need not reiterate the case here; suffice it to say, that when I had dismissed the boys to their different rooms, and was alone with the father, he jumped up, shook my hand, and again said, "Sir, I am the maddest man you ever saw; but while first I was mad at the teacher, now I am mad at my boy. He will catch it when he gets home."

"Just look over this note, if you please," said Miss C., the other day. It was a fearfully coarse note, both in style and substance, of an equally coarse woman. Her boy had been spoken to about his fighting propensities, his use of slang, his cursing, and general meddlesomeness. "How did you dispose of the case?" was my question. "Well, this being the third time punishment seemed necessary, I asked the mother to come to your office at this hour. I think you will find her up-stairs." I did find her there. Her appearance was that of a brutal, coarse nature, who had fire and

brimstone in her eyes. At my entrance she arose, put her arms akimbo, and addressed me as follows: "I want you to understand, Mr. Superintendent, that my boy is not a bad boy; he never tells a lie, and is as gentle as a lamb, and I don't understand why the teacher should pick at my boy all the time." I quietly interrogated her concerning the boy's playmates, and then sent for a number of them. Very few questions sufficed to establish the guilt of the boy in question indisputably. The teacher testified again, in presence of the mother, how hatefully the boy acted when he found that he could not have his own way. Then the ire of the mother got the better of her, and she began to abuse the teacher. I put a stop to that at once, asked the teacher kindly to withdraw, and I would settle the matter. Now I gave the mother to understand that if the boy should persist in his ugly behavior I would have him arrested, and brought before his honor the mayor, and I should move that he be sent to the Reform Farm.

This quieted the woman wonderfully and quickly. She was, like every bully, at heart a coward. She soon began to cry, admitted the boy's badness, and promised to keep an eye on him in the future.

She was a small, not pretty, but highly intelligent young teacher, who, not by a freak of nature, but by the absolute confidence of her superiors, had been assigned to a C intermediate school. Among her pupils, was one who proved in every way a black sheep. He

came from what was known as a highly cultured family, which in this case meant a very conceited family. The father was a physician. One day this Dr. X. came to the schoolhouse, at once went to the room of the teacher in question, knocked, and asked to say a word to her in the corridor. She came out, and stood before this tall man with expectation in her face. This is the conversation that took place. "Miss G., I understand that you charge my boy with having prevaricated. How can you dare to do that?" — "I never said he prevaricated. I am sure I did not use that word, sir." — "Do you mean to say that you did not accuse him of prevarication?" — "That is exactly what I mean." — "What did you say, then?" And this small, young, inexperienced woman of strong character looked up with her fearless steel-blue eyes, like a lion-tamer, straight into his enraged countenance, and said, "*I did say he lied*, and I can prove that he did." Not another word was said. Dr. X. turned, and left her and the house.

My observations. — A boy of twelve years, healthy, strong, fine head, intelligent but defiant looks, regular though dirty face, frequently distorted by disdainful, ugly smiles, dilapidated appearance, clothes torn though of good material. *Teacher's report.* — Boy played truant thirteen half days and ten whole days; brings excuses from his mother which are evidently untrue, — such as, sore foot, when the boy played at the corners all day long; sprained hand, when no sign of any such

casualty can be found, nay, when the boy himself is unable to state which hand was sprained; and other like statements. Boy is not reliable, neither in word nor action; is disobedient, unwilling to study or pay attention. His father sometimes in a fit of indignation lashes him with a cowhide till he (the father) is exhausted. Whipping in school is of no use; boy calls it tickling. He demoralizes my school. Mr. Klemm, what shall I do with him?

A RESPECTABLE-LOOKING but emaciated woman with receding chin, tears in her eyes, pushes a boy into my office, saying, "There, mister, I have brought him. He won't mind me. What shall I do? He won't go to school. Can't you whip him, and make a good boy of him?" *Boy.* — "There, old woman, don't tell a pack o' lies about me, or I won't stay." Inquiry soon revealed the fact that the boy had been the terror of his school, had demoralized it till he had to be expelled. The teachers protested when they saw him.

THIS is the shady side of school-life.

PROFESSIONAL SUPERVISION.

A SUPERINTENDENT in the West has a rather characteristic way of exercising criticism upon the work of his teachers. He visits a schoolroom, sits down in an unfrequented corner, and carefully observes what is going on. When he leaves he makes a pleasant re-

mark to the teacher, and, if the occasion seems to call for it, also to the pupils. Then he retires to his office, and fills out a blank like the one attached below, keeps this on record, and sends an exact copy to the teacher, — in closed envelope, of course. She there has it, black on white, what he thinks of her work, of her manner of teaching and managing. If she takes exception to any of the superintendent's remarks, she meets him at his office, and then and there the superintendent holds a "teacher's meeting" (a private one); that is to say, makes her understand what her mistakes are, by applying the test of principles.

I full well understand that this method of criticising can be perverted into the most unpleasant fault-finding, just as every other good method can be misapplied. The method is all right; it is only the manner of applying it which may or may not make the thing successful. If the teachers know that their superior officer means well, that he is kind-hearted, and intends this for their own advantage as well as for that of the schools, they will receive this written criticism in the spirit in which it is offered. Not that he answers every query found below as often as he makes a visit. No: sometimes he finds it desirable to call the teacher's attention to a very weak spot in her management or mode of teaching, and therefore dwells on this point, leaving the other questions blank.

A teacher gets, in the course of a year, about a dozen of these blanks, partly or entirely filled out by the superintendent, and can mark, pretty accurately,

whether she is gaining in skill of teaching and managing, or not. The questions attached below are not the same as last year. He changes them from time to time, introducing a new feature now and then, dropping other points which have found their way into the comprehension of his corps of teachers, "with the impressibility of truth," as Friend Hailmann says.

I offer these questions to my colleagues, because they seem to me in the highest degree suggestive. Though it may readily be guessed who the superintendent in question is, it is not desirable to publish his name. He is a modest man, and might feel embarrassed if he sees his name in print.

COPY OF THE BLANK.

.....*Ward,*.....*Grade,*.....*Teacher.*

Observations made by the Superintendent.....*188*.....

QUESTIONS.	ANSWERS.
1. Did the teacher possess the undivided attention of h—— pupils?	
2. Was h—— instruction interesting enough to secure attention?	
3. Was it objective? did —— illustrate it sufficiently?	
4. Were the teacher's statements unquestionable?	
5. Did they follow each other in logical order?	
6. Was the instruction clear and comprehensible to all?	
7. Had it practical bearings upon actual conditions of life?	
8. Did it seem to promise lasting results?	
9. Was the pupil's self-activity called into play?	

QUESTIONS. ANSWERS.

10. Was the teacher's manner of questioning correct?
11. Did —— show proper regard to the pupil's individuality?
12. Was the object of the lesson secured by practical application?
13. Did the teacher seem to have consulted the course of study?
14. Did —— seem to have prepared h——self for the lesson?
15. Did —— aid the pupils in the development of new ideas?
16. Did —— guide the children in discovering their errors?
17. Did the pupils speak in complete sentences?
18. Did it seem as if the teacher asked the brighter pupils only?
19. Was the teacher too talkative?
20. Were mistakes in pronunciation and emphasis left uncorrected?
21. Did the teacher always address h—— questions to the whole class?
22. Did —— indulge in repeating the pupil's answer?
23. Did —— say or do any thing which the pupils might have said or done themselves?
24. Was the teacher's writing on the board commendable?
25. Did the class seem to make progress in their studies?
26. In what branch of study did the class seem to be weak?
27. Was order maintained by harsh treatment?
28. Did the teacher watch the class steadily?
29. Did —— change h—— position unnecessarily?
30. Did —— ignore faults and irregularities?
31. Was the class quiet? diligent?

QUESTIONS. ANSWERS.

32. How was the order in coming and going, and handling books and utensils?
33. Was the teacher just in praising? reprimanding?
34. Was —— consistent in all —— actions?
35. Did —— practise self-command?
36. What was the condition of the atmosphere? temperature?

Remarks: .....

MECHANICAL VIRTUES.

A FATHER who had been annoyed considerably by notes from the teacher which referred to his child's want of punctuality, inaccuracy, carelessness, and similar shortcomings, called at my office one day, and expressed his desire to have a friendly talk with me. He did not mean to complain, as he said, but desired information.

Said he, "What is the use of insisting upon the children being in school punctually at nine? And what is the use of insisting upon a uniform ruling of the slates and various other similar requirements? I fail to see their necessity. You know it is difficult for the whole household to adapt itself to the rules of school; and it is oftentimes attended with much heart-burning and shedding of tears, when the child attempts to be prompt. Now, if there is any virtue in your requirements and rules, I fail to see it."

"Mr. M.," said I, "how have you become so

courteous a gentleman? for everybody who knows you admires your uniform kindness and politeness."—"Why," said he, "that was not difficult. I remember when I was young, I was induced to take off my hat, and say, 'Good-morning,' 'Good-day,' or whatever time of the day it may have been. All that small coin of politeness is simply the result of habit, there is nothing more in it. But what has that got to do with the question that I asked?"

"A great deal, for you have struck the keynote of my argument. Punctuality is acquired mechanically, by habitual practice; so are exactness, promptness, and other virtues. Now, all these small mechanical virtues must be insisted upon in school, so that they may grow into ethical laws which are obeyed without question, having become our second nature, so to speak. Out of ethical or moral virtues grow celestial virtues. The latter are far beyond the code of law, just as the mechanical virtues are below it.

"Let me show you, in a single instance, what I mean. We insist upon the boys practising politeness. This mechanical virtue, politeness, will, as the boy advances in age, develop into respect for others. This respect is something that comes within the pale of the code of civil law. The law does not demand politeness; but it demands respectful treatment of others, for it punishes disrespect, at least lays the offender open to a suit for damages. Now, out of this moral virtue, respect for others, grows the celestial virtue, kindness, which is completely beyond the code of law.

The law can neither enforce politeness nor kindness,—in other words, neither a mechanical nor a celestial virtue.

"Thus you see, by this one example, why we are obliged to insist upon all those small virtues, which in themselves perhaps are worth little, but which are the fountain-head of greater virtues. Thus out of cleanliness grows purity; out of accuracy, truthfulness; out of punctuality, regularity and order; and so on. If we allowed your child to come to school at whatever time it pleased, or if we allowed it to follow its own inclination in preparing work on the slate or on paper, we would soon notice a flaw in the child's education.

"We teachers, you will know, are rather anxious that our schools should not be considered mere knowledge-shops, but institutions for the moral and civil training of children as well. There is also this other fact regarding our insisting upon punctuality, which I must mention. It is, that the child thereby learns that he is only one among a great number, who all have to obey the same law. Equality before the law is a thing which no child can learn unless it attends a public school. The child taught privately at home will forever be selfishly inclined. However careful or consistent your home training may be, that one thing, civil virtue, can only be learned in a community, and the school is a state in miniature."

Mr. M. arose, shook hands with me, and said, "I am convinced, and shall hereafter assist you in your endeavors so far as they concern my child." When

the gentleman had left my office, I compared this visit with others from ladies; and I could not help remembering Charles Reade's common-sense advice to officials, which is to this effect: "If you would win over a man, argue with him: if a woman, persuade her."

A CASE OF UNINTENTIONAL CRUELTY.

It was one of those rare warm days in January, when my daily duties led me into a schoolroom at recess time. Out in the yard the boys and girls played to their heart's content, — shouted, ran, and followed the impulses of nature which invigorates itself by motion; while in the schoolroom, the windows of which were closed, sat about twenty pupils, bent over their slates, "doing sums." My first question to the teacher was, "What are these pupils doing?" *Ans.* — "They are kept in because they are backward in arithmetic, having been absent several weeks on account of measles and scarlet fever." How it is possible that any sane person can act thus, is almost inconceivable. I argued with the teacher, saying, —

"Suppose two boys run a race. In the middle of the course one of the boys sprains his ankle: do you expect him to catch up? Again, these children have lost four weeks; they are weak in body, tender in health, and the continuity of their instruction has been broken. I understand full well that they are backward in many studies; but do you think that by

depriving them of their recess, and of that healthful, invigorating motion which is the result of play, they will catch up with the others? If there are any pupils in your classroom whose bodily condition should be taken into consideration, it is these. *Mens sana in corpore sano.* How wearied and pale that little girl over yonder looks! See how her nostrils twitch, her head jerks, and her hands tremble. Do let us try an experiment. Please let these children go to play with the others, and then let us observe how they look when they come back."

The teacher did as I requested; and the result of her observation after recess was, that she said, "Rest assured that will never occur again. My pupils shall have their recess, and I shall go and play with them."

CHAPTER III.

FUNDAMENTAL ERRORS IN TEACHING.

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FUNDAMENTAL ERRORS IN TEACHING.

PER-CENT SYSTEM OF GRADING.

It is a notable fact, that while people will not buy an exploded contrivance, or a worn-out machine, or manufacture goods for the market by antiquated methods, but insist on the latest improvements, they seem to be satisfied with antiquated methods in school, as they were applied by the proverbial school-keepers of yore. And while they hire in their workshops and factories nothing but skilled labor, they are not much troubled when they see persons employed as teachers who have not a clear idea of what such terms as methods, didactics, etc., imply. Poor talent is frequently tolerated because it is home talent. While people would ridicule any one who would travel with rheumatic post-horses, or carry his money in saddle-bags, instead of making use of express-trains and the many facilities offered by our system of banking, these same people permit their children, year after year, to travel by antiquated means through the curriculum of school. People who advocate good wholesome food, and who decry adulteration of food, allow their children to be fed with indigestible mental food.

in form of grammar rules which never did nor ever will develop mental faculties or linguistic skill, but which were considered a most necessary part of a scholar's outfit during the "good olden times." A superintendent cannot cure the evil radically; all that is in his power is to apply palliative remedies. The great work of reform must be accomplished largely by the teachers. I deem it desirable to discuss some of the methods that ought to give way to better ones, and to suggest the latter.

Per-Cent System of Grading.—This system of grading the pupils, that is, determining their relative standing in the class on a scale of one hundred, has greatly undermined the teacher's value. It has brought it about, that pupils think that their close attention to every-day duties is not needed, that "studying up" at the close of the term will secure them the necessary "per cents." And this, to speak candidly, is arguing correctly. Since, according to the per-cent system, all examination questions must be matter-of-fact questions, so that they may be marked on a scale of one hundred, it will be easily seen that facts temporarily stored up in the memory will serve the purpose of passing the examination. This is contrary to the principles of sound and rational education, which condemn such a method of acquiring knowledge as false and pernicious. In order to improve the teaching, and bring it back to sound and rational principles, we must take away the high pressure of the per-cent system; first, by doing away with the

scale which suggests the mode of questioning; second, change the mode of dry, matter-of-fact questioning, which conditions the mode of teaching; third, change our mode of teaching in order to comply with the requirements of nature and actual life.

The remedy I suggest is simple. Let the pupils' papers be examined by the teacher, and let her mark them "very good," "good," "satisfactory," or "poor;" any similar expressions will suffice. This is recommended, not only for the reason specified above, but for the further reason that in this case the individuality of the pupil may, and undoubtedly will be, considered. The per-cent system is not flexible: it submits every pupil to its cast-iron rule. It does not take the pupils' natural gifts into consideration, simply because the answers to questions like this one, "What seaport in Alabama?" can only be right or wrong. There is no alternative. Now, give five or ten of such questions, and let the memory of a boy who is to answer them be weak for geographical data; and the likelihood is, that he comes out of such an examination plucked and mortified, his spirit dampened, his interest gone, and his ambition will lead him to gather, only for temporary use, just such "tidbits of knowledge," and then try again. The same boy may have a very creditable amount of geographical knowledge; only it is all connected organically with previous cognitions in form of associations of thought, and he would make a most creditable showing if he were asked to make an imaginary journey along the

coast of the Mexican Gulf, and state what countries, rivers, harbors, seaports, etc., he would touch.

There is also an unpardonable injustice in saying, "This child has reached ninety per cent, the other only sixty per cent." Who knows but that the sixty per cent is the result of hard and earnest toil of a boy who may have labored under disadvantages which the other boy who reached ninety per cent never knew? Who knows but that the sixty-per-cent boy, if measured by a hitherto unknown scale, would far outrank the other in character, in steadfastness of purpose, in virtue, in tenacity, in moral strength, and in other regards? While the ninety-per-cent boy, perhaps, was surrounded by all the advantages which a home of culture and refinement offers, the sixty-per-cent boy, perhaps, could attend school but half the time, and had to help support the family; and yet he reached sixty per cent! The injustice is so glaring that it cries for redress.

There is also this to be argued against the per-cent system, at least so far as it is found in the primary grades: It is the using of terms which are incomprehensible to the small child. He understands if we say an exercise is done well or not well. But to mark the child's work eighty-five per cent, sixty per cent, etc., is about as intelligible to him as marking it Popocatepetl or Parallelopipedon; in other words, it is using a symbol where no symbol as yet is desirable.

COMPETITION IN SCHOOL.

THE high pressure of the per-cent system on one hand, competition caused by too many examinations on the other, crushes out all individuality, and makes our boys and girls men and women of whom thirteen do not make a dozen. "Competition is a curse, because it treats children as if they were all endowed with the same aptitude," says a writer in a recent number of an educational journal. "Overwork on the one side," he says, "coupled with self-conceit; despair on the other, coupled with the entire loss of energy, — are the results of competition in our schools." He also remarks that "competition is immoral, because it is based upon the law of the survival of the fittest; which, however natural it may be, is not a moral law."

Now, as to the number of examinations, and as to their mode, the superintendent, by virtue of his position, has the decision in his hand. But that does not, and can not, remove competition from the schools entirely, since in some classes the teacher does nothing but examine all day. The following sarcastic statement is the gist of an article upon this subject from the pen of Superintendent Aaron Gove of Denver, a most accomplished leader of educational affairs in the West: "Teachers are not teaching; they are drifting. A pupil is assigned a task. Soon he is examined. When he has demonstrated the accomplishment of his task, he is excused. The recitation is concluded. He is assigned another task. An exam-

ination determines its performance. So is composed the daily routine. He is tested, tried constantly. If he does not know a certain thing, he is asked to look it up in his text-book. At evening the father spends a tired hour in instructing. He wonders what teachers do during the day. The pupil learns that recitation is examination. He must present results, no matter how he obtained them. Ponies and keys are useful. The home furnishes a little poor help. The world has passed beyond the need of teachers. School is a place in which to sit and tell daily what has been learned from books. All requisites are in the book. Proper application on the part of the pupil will appropriate them. The chief duties of the adult person in the schoolroom are to prevent riot, and to examine pupils."

Is this an exaggeration? God may grant it! These daily examinations rob the pupil of that tranquillity without which no healthy mental growth is possible; it defrauds the teacher of the opportunity of applying herself to the weaker pupils, and lend them a helping hand, because she spends her time in marking her pupils' work on a scale of one hundred, and to write examination questions on the board.

The per-cent system subjects all the pupils of a class to the treatment of Strasburg geese, which are fed in close confinement — that is, noodled as the technical term has it — till their livers are unnaturally large; only that it is the memory of the children which is thus noodled.

This mode of daily competitive examinations acts like mildew upon the work of pupils, and should speedily give way to teaching. It is but just to say, that many of our teachers have recognized the evil influence of the per-cent system and competitive examinations, and now spend their time *in occupation for which they were engaged* by the authorities. Entering a schoolroom, it can at once be seen whether such a teacher, or a mere school-keeper, holds sway. In the schoolroom of the teacher, the pupils are, as a rule, more eager to learn than in the one where daily examinations are held; and that painful anxiety so often visible upon the pupils' faces, which blights all joys and pleasures of life, will not be found. The teacher bears in mind, that no two pupils are gifted alike by Mother Nature, just as little as she produces two leaves exactly alike. The inevitable difference in aptitude, in power of comprehension and application, found among children, is taken into consideration; and each pupil is permitted and led to go to the limits of his capabilities. The school-keeper, on the other hand, who believes in grading on the scale of one hundred, spurs his pupils, drives and pushes them by means of competitive examinations, considering them all alike in natural endowments and capabilities; and the short, but important, educational law, "Individualize," is unknown to him.

MEMORIZING THE PRINTED PAGE.

ANOTHER, though not the last, and by no means the least, of the antediluvian fossils found in school-teaching, is the reliance of teachers and pupils on books; rote-learning, or unproductive memorizing of text-books. When we see children learn by heart from the printed page such disconnected, though highly flavored, tidbits of information found almost on every page of the text-books of geography; as, for instance, "Extensive forests of deciduous trees cover the greater part of this section." "The stone mountain in DeKalb County is a great curiosity." "Indian mounds of an unknown antiquity are found in Georgia." "'Zenith' and 'nadir' are two Arabic terms imparting their own signification," — we cannot but thank kind Providence for having gifted the human memory with the happy faculty of throwing off what has not gone through the mill of reason and understanding. What a frightful waste of energy is there in schools where such unpalatable and indigestible matter is set before the pupils who are told to "study" their geography lesson! Or when we see children try to "figure out," or mechanically solve problems in arithmetic, by applying rules committed to memory from the text-book, instead of rules which are the direct result of practice and reasoning, we cannot but admit that there is more than one grain of truth in the indignant remark of a great lecturer: "Our country has become great, not because of its public-school system, but despite of it."

Or when we hear children recite grammar rules, and prattle about numeral adjectives, correlative conjunctions, or causal adverbial clauses, or inseparable phrases, or subordinate propositions, or co-ordinate forms of conjugation, and the like, before they can give an intelligent account of an event, or even give utterance to a simple thought without doing violence to their mother-tongue, we cannot but stand in mute astonishment, and wonder at the incongruities which exist between the requirements of life and those of the schoolmaster.

Memorizing the text-book is but a poor substitute for true knowledge. It is a sad mistake to think children of our primary and intermediate grades gain much valuable knowledge from text-books. Pupils of riper age and adults may, and unquestionably do, gain knowledge from the printed pages: young children do not. There are two kinds of knowledge,—(1) that which has become part of our being, having been mentally assimilated, as it were; and (2) that with which we stuff our pockets (our memory). Those who learn for the sake of passing an examination merely stuff their pockets. This is done much faster than in the other way. Those who chew their mental food, digest and assimilate it, may at times get discouraged at the seemingly small amount they gain; but since they learn thoroughly, they can never lose it again, and in the end are the gainers. True knowledge is logically and naturally linked with previous cognitions.

Such knowledge is experience, while the pupil who

stuffs his memory is ever obliged to fill it anew; his knowledge is of a fleeting nature. Besides, he weakens his memory by mentally swallowing and not digesting. If we look at our psychological organs as we do at our physiological organs, we cannot fail to notice the striking resemblance. A person who learns by using his five senses, and is made to clearly understand the logical connection between new knowledge and previous cognitions, will find himself gaining in intellectual strength. History and our own every-day experience tell us that it is these very persons who make their mark in the world, who prove to be the strongest and bravest in the battle of life.

Says a gifted writer, in "Intelligence:" "The protest against mechanical education, against cramming and working for per cents, is timely, and cannot be too strongly put. The protest, however, is hurled properly against a false method of imparting knowledge. If the mechanical methods were successful in conveying knowledge, the fact that they are mechanical would not stand against them. If you can cram knowledge into children, in God's name do it; but *you cannot.* The student who is crammed is not intelligent: he does not know facts; he gains neither information nor discipline. There is no mechanical way of providing intellectual results. Dean Swift's Academy of Laputa is not what is, but only what Gulliver saw. Why should we try the experiment of writing a geometrical problem on a wafer, and compelling our pupil to swallow it, in order to impress the demonstra-

tion on his brain? The object of teaching is to store the mind with knowledge; but it is also to develop mental power and moral character. The acquisition and retention of exact, systematic, true, good, and beautiful knowledge, creates a clear mind and a pure heart. Knowledge and power are one; they coalesce and become wisdom, the prize that is precious above rubies."

EXAMINATION QUESTIONS.

HERE is a set of questions of the old customary type: —

What isthmus joins North and South America?
What cape projects into the Arctic Ocean?
What island east of Greenland?
What great river empties into the Gulf of Mexico?
What river empties into the Arctic Ocean?
What country south-east of Mexico?
What country north of New England?
What is the largest river in New England?
Which is the smallest of the Middle States?
What seaport in South Carolina?

And here is another set of similar questions: —

How many bones in the hand?
Name the bones of the skull.
State composition of the bones.
What is the office of the heart?
What are arteries? Veins?
Name the digestive organs.
How many teeth has man?
Describe the structure of the ear.
Describe the structure of a muscle.

These are patent questions suggested, nay, required, by the abominable system of grading by per cents. If we do away with this mode of grading papers and pupils, we can ask questions of wider bearing, — questions, the answering of which will permit the pupil to show his skill in applying language; to give a full account of certain branches of knowledge, as far as he has mastered them; and show be' not only *what* he knows, but *how* he knows it.

Acting upon this suggestion, it would be well to change the customary examination questions. Instead of such questions as the above, we might submit some like these: —

Geography. — If you were to make a voyage from Copenhagen to Rome, along the coast of Western Europe, what countries would you pass? Mention all important rivers, the mouths of which you would pass on this voyage. Mention large seaports, also the capitals of the countries you pass. Mention the mountain ranges and two important lakes situated in Western Europe. State what people inhabit these different countries, and what language they speak, etc. Suppose a straight line be drawn from Washington to San Francisco, state through what States and Territories this line would go. Mention large cities south and north of this line. Mention the different mountain ranges and large rivers the line will cross, etc. Describe the Ohio Valley; extent, rivers, watersheds, lakes (if any), canals, cities, manufactories, natural products, means of commerce, etc. Why is Salt Lake salt, and Lake Erie not? Why are rivers on the east side of the Appalachian Mountains so much shorter than those on the west? Why does the Miami River flow south? What States are drained by the Mississippi? Why is the climate of Oregon much warmer than that of Minnesota? Name the principal waters that wash the shores of

North America. How would you travel by water from Hamilton to New Orleans? Mention the highest mountains in South America; the largest river; the largest state; four of the most important cities; two islands; two seaports, etc. Describe a journey: select your own point of destination.

United States History. — Give a short account of the mound-builders. What led to the re-discovery of America by Columbus? Describe the Spanish explorations in the South-west. State how the several Colonies were governed. Give a short account of William Penn and his colony. Give a short account of the French and Indian War. What were the causes of the Revolutionary War? Define the terms "revolution" and "rebellion." State some leading ideas of the Declaration of Independence.

General History. — What are the sources of our knowledge of Babylonian, Assyrian, and Chaldæan history? State what you learned of the culture of the Shemitic races. State the rise and fall of the Phœnician state; a few dates. Give an account of the early history of the Hebrews; three dates. State what you learned of the customs and culture of the ancient Egyptians. What did Solon and Pericles do, that they deserve to be classed among the greatest of men? Describe the heroic death of Leonidas and his three hundred Spartans. Give a short account of the life and career of Tiberius Gracchus. State some causes of the downfall of the Roman Republic. Give an account of the Roman conquests in Gaul and Germany.

Physiology. — Describe the teeth. State how they are preserved, and what makes them decay early. State difference between teeth and bones. Give rules of hygiene of the bones. (Examples.) Describe the anatomy of the muscular system. Give a description of the anatomy of the circulatory organs. Give an account of the physiology of the digestive organs. State hygienic rules regarding the respiratory organs.

[NOTE. — In making these statements, confine yourself to the essentials. Lead-pencil sketches in the margin, illustrating the subject matter, will greatly enhance the value of the work.]

Natural Philosophy. — Describe the common lifting-pump and the force-pump. State the underlying principles. Describe the hydrostatic or hydraulic press. Principles. Describe an artesian well. Principles. Define: Matter, Inertia, Elasticity, Energy, Gravitation. Describe the formation of primary and secondary rainbows. State why, of all the colors, *red* is always at the top in a primary bow. Where is it in a secondary bow, and why? Show why the image of an object is as far behind the mirror as the object is in front. Describe the human ear, and state the functions of its principal parts. Give one important law of acoustics. Describe an organ-pipe, also a string-instrument, and show how sound is produced.

[NOTE. — Lead-pencil sketches in the text, illustrating the subject matter, will greatly enhance the value of the work.]

Literature. — State in chronologic order what races inhabited Great Britain, or ruled over it. What are the components of the English language now? State King Alfred's literary influence. Give a short biographical sketch of Chaucer. State the plan of the Canterbury Tales. Give leading features of "The Faerie Queene." What is the literary importance of Edmund Spenser? What is said about the early theatres? What is commonly understood by the term "literature"? Give a brief account of John Milton's literary career. Give an account of Bacon's political success and disgrace. Give a brief synopsis of Shakspeare's "Hamlet." State Shakspeare's influence in the history of the English language. Give the titles of three historical, two semi-historical or legendary, and five fictitious plays of Shakspeare.

The above questions are inserted merely to show the nature of the examinations that were held under my direction. They are suggestive both to teachers and pupils, and, it is to be hoped, may show the way out of the mire of mechanical memory-cramming, into rational teaching. In the high school, it should be

the custom to give out, at the end of each term, a limited number of themes from each study (except mathematics), and each pupil should be permitted to choose one of them, and to write as complete a dissertation as possible upon that subject. These essays are either satisfactory, or they are not. In the latter case, a second examination may be required. This procedure will make the gauging of children's intellectual depth by per cents impossible. It will make the teacher's instruction more rational and thorough. It will teach the pupils to learn well. But, above all, it will cause their power of application to grow. It will make a language lesson of every lesson, even in arithmetic, since it obliges them to express well what they have learned. Granted, that this is not making the work of the teacher easier; but it need scarcely be asserted, that the schools are not maintained for the better accommodation of teachers.

FROM THE FRYING-PAN INTO THE FIRE.

During the last ten years, school education in this country has received a new impulse; and one of the most objectionable features of school work in former years, namely, the custom of subjecting pupils to the hardship of too many written examinations, has been frequently and savagely attacked. I ought to add, justly, because the evil effects of frequent written examinations can scarcely be estimated, particularly if their results are marked upon the scale of one hundred. There is a complete chain of cause and effect

in this matter. The scale used in marking necessitates a peculiar mode of questioning; that is to say, little matter-of-fact questions must be asked, in order to gauge the answers on a scale of one hundred, or any other mathematical scale. Teachers, knowing the kind of questions to be asked, fashion their instruction to suit the requirements of the examination. Thus they lay undue weight upon the development of the memory, overloading the mental stomach of their pupils with facts which are very easily forgotten after the examination is over. Pupils, knowing by experience what kind of examinations are given, learn accordingly; that is, acquire knowledge in such a manner as will assure them good results on examination-day. All rational teaching is thus killed in the bud.

It has come to be well understood, that the teacher is to be a teacher, and not a mere school-keeper and task-master; and the better that fact came to be understood, the greater and more obstinate became the opposition and justifiable wrath against the stultifying examinations, the number of which was reduced at various points at first from ten to five, from five to three, and in some places even to one per year. Promotions were based partly upon the results of examinations, partly upon the recommendations of the teachers, who expressed their judgment by adding the word *prepared*, or *doubtful*, or *unprepared*, after the names of the pupils in the class-record. This mode was adopted some years ago in Hamilton, and

it works very well. It recognizes the teacher's value, and it shows the pupils that the faithful discharge of their daily duties will count when it comes to a final judgment at the close of the year.

Of late, a very objectionable and detrimental step with regard to promotions has been recommended in various places. The fatal result of making promotions dependent upon written examinations, and the evil influence it has upon the daily work in the class-room, was at once conceded; and, therefore, written examinations were abolished. In their stead, was put a system of *daily marking*. I need not describe this any further; the word carries with it its own definition. Teachers, principals, and editors of the daily press, intelligent and otherwise, highly applauded the new measure. The panacea of all educational evils seemed to have been found.

Let us see whether the new plan can be recommended. Of what does it consist?

Any good daily programme of school-work has no less than five lessons. I need not enumerate them. The teacher sits at her desk, pencil in hand, and the class-record before her. Let the first lesson be arithmetic. A certain number of problems are given out. They are worked. Now the work is examined, and the results are recorded, — so many 100's, so many 90's, so many 80's, etc., *ad infinitum* and *ad nauseam*. There is no time for teaching. The teacher is degraded to a mere *marking machine*. The hour is past. Perhaps geography is taken up

now. The lesson (the Lord forgive the irony of this term!) consists in hearing the pupils recite what they memorized from the printed page; and as they proceed, they receive their mark which is instantly recorded. Demonstrations on the board, and investigation of maps, explanation, Socratic questioning, and all that is justly considered part of rational teaching, is prevented by the necessity of recording marks. Thus the spelling-lessons are merely recitations of words crammed and jammed into the memory, there to abide only for the time being; and every pupil of common-sense will amend the Scripture word so as to read, "Sufficient unto the day is the nonsense thereof." But I must stop here, or the fair reader will lay down the book, loathing the sight of the picture I am delineating.

The monthly and term examinations are abolished, and *daily examinations are put in their places.* That's the long and the short of it, to use a little wholesome slang. From three, four, or five examinations per year, the number is raised to two hundred; and this is what is called progress. Comenius, Pestalozzi, Locke, Rousseau, Diesterweg, and Horace Mann will turn in their graves when they hear of this wonderful progress.

It will be said that this system of daily marking does not necessarily prevent rational teaching. No, it does not: but I have yet to see the horse that can walk straight in a circular treadmill; and I have yet to see the pupil who will have eyes and ears for any

thing but his marks, if he knows that upon that tender thread hangs his chance of promotion; and I have yet to see the teacher's character that can cope with an influence so deadening, with a routine so stultifying, and with a custom so degrading, as the daily examinations and daily marking.

Examinations are very useful institutions; it is only their abuse which makes them objectionable: but let them be examinations, not "examinationlets." Let there be a reasonable number of them, not two hundred a year. Do not make promotions dependent upon the examination wholly; but let their results be accompanied by a recommendation from the teacher who knows the pupil, and has had opportunities to study him all the year round. Where the system of daily marking is adopted, the school authorities make a grave and serious mistake. They actually "kill" the school, and make of it a drilling institution; and the art of teaching is thus degraded to a handicraft.

How true are the words of a great American lecturer who said, "Every thing American is a fusion of distant and antagonistic elements. Active intellect, practical skill, world-wide enterprise, meet side by side with dead conservatism in church and school, the most liberal ideas with devoted habits and meek creed in home and family; aggressive freedom, with conceited narrowness. Nothing can be praised in our wide realm without an abundance of damning exceptions, and nothing denounced without a liberal share of cordial praise." But the daily marking of school-

work does not belong to those things which deserve cordial praise through being denounced, for there is not one iota of merit in it.

THE OUTLOOK.

There is in every nation, as in the life of every individual, a time of plasticity. During this time the human being develops his individuality. Certain qualities in him become fixed, and capable of being transmitted to his children. What is individuality in the person is type in the nation. The English settlers in America, cut loose from the mother country and its culture, dependent upon their own strength, ingenuity, and resources, soon drifted away from old established customs, thoughts, modes of life and action, adapted themselves to surrounding circumstances, and developed a type peculiarly American. This type became so pronounced during the eighteenth century, that it asserted itself in violent opposition to England. The habits, thoughts, social relations, mode of life, manner of action, etc., were no longer colonial: they had become national. In the same way the mode of teaching and learning had developed certain peculiar traits, had become typical.

We all know what caused the great abundance of *self-made men:* they were, and still are, typically American. Now, the typical American *boy* gained his knowledge as the man gained his fortune, — namely, without assistance. What he is and has, he is and has by his own exertion, attended by much waste of

time and energy. The *self-made student* acquires his knowledge from books, not through instruction. He does not learn a thing for the sake of knowing it, or for the sake of the discipline it affords, but merely toward securing other ends. Now, the modes of teaching of the typical American school of the earlier periods were legitimate: they were the exponents of life in America. That the typical American teacher of yore *kept school*, *heard recitations*, *assigned lessons*, *examined*, *and tested daily and hourly*, we can comprehend — and pardon. But life, and the American people, have changed. The old American type is fast receding, since untold millions of immigrants have arrived. The Union is a gigantic crucible, within which the representatives of the different nations are fused to a homogeneous whole. Each nation adds some of its virtues, and, alas! some of its vices, to the fusion.

We are at present in a second era of plasticity; we see it from changes going on within reach of our own experience. Thirty years ago this country was songless. Gen. Grant used to say: "I know only two tunes; one is Yankee Doodle, and the other isn't." The changes going on in our country in industrial pursuits, in art, in architecture, in habits and modes of living, are very perceptible, but need not be enumerated here. And we are changing our mode of teaching and studying also. When the great influx of foreign elements ceases, the mixture in the crucible will become clear, and the future type of the

American school will have been developed. It will not be European, rest assured; neither will it be American, as that term is now understood. It is devoutly to be hoped that the pernicious marking system, immoral competition, constant testing, and soulless memorizing of the printed page, will not be leading features of the new American school.

CATCH-WORDS.

THE historian who, in future years, will write the history of the common schools of our era, will undoubtedly choose as a head-line these words: *The era of pedagogical catch-words.*

Verily, we are in the midst of the time of educational catch-words. We fail in strength to let go of mere words, and to struggle upward to deeds. We have exhumed all the worthy pedagogues of the past, have carefully examined and studied them, have lifted education to the lofty height of a science, have neatly labelled and systematized every branch of educational theory and practice; and to the uninitiated eye it is a sight worthy to make the heart glad.

But, somehow, there seems to be a discrepancy between our theory and our practice, or theory must have grown beyond our heads. We have striven toward art, and have reached artificiality. We have sketched the imposing temple of education in grand, bold outlines, and then injured it by suffocating details. We have departed from nature, and opened the gates, nay, even the most sacred compartments of

education to the very arch-foes of natural growth, — to routinism and mechanism. We have to thank ourselves for our want of success. We should confess this, and humbly whisper, "Lord, forgive us, for we knew not what we did!" We owe a great deal of our present indecision and helplessness to the catch-words that seemed comprehensible to every one by their popularity. And I dare say this popularity gave rise to the fatal belief that with having the word we had the thing.

There is scarcely a teacher who has not his or her own definite opinion as to the aim and end of popular education; there are but few who could not, at length and with the air of conviction, interpret to laymen the principles of teaching according to Nature's laws, or profoundly explain the psychological influence of certain branches, or certain modes of instruction, upon the formation of character; not one but seems to know all about moral and æsthetic culture. There is not a graduate of a normal school, not a teacher of one year's experience, but could make use of such catch-words as "the principle of objective teaching," "analytic and synthetic methods," and others.

We have caught the words, and fought with them; and, according to the verdict of immortal Goethe, "words are very convenient weapons." True, the actual results are not up to just expectations, and certainly not in harmony with the apparently profound knowledge exhibited in professional circles.

Do not, fair reader, for a moment entertain the

idea that this state of affairs prevails in our profession only. It is the case in many other professions of our time. That the catch-words are not as easily detected, for instance, in the science and practice of medicine as they are in our profession, is owing to the fact that medicine is carefully guarded by a high wall of Latin, while we must speak plain English or German, as the case may be.

CHAPTER IV.

SOME PRINCIPLES AND METHODS OF TEACHING.

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SOME PRINCIPLES AND METHODS OF TEACHING.

(AFTER LINDNER'S TREATISE.)

1. TEACH IN ACCORDANCE WITH NATURE'S LAWS.

THIS principle may be interpreted in two ways. First, viewed objectively, it may mean: In teaching, proceed as Nature does in all her work. She always awaits the proper time. She prepares her matter before she gives it shape. Her work is from within outwards. She begins her formations with general outlines. She never makes a leap, but proceeds step by step. She develops all her various and manifold forms from the smallest, imperceptible beginnings. She proceeds from the easy to the more difficult. She never does any thing uselessly. She never acts rashly, yet ever moves onward. She never isolates any thing, but keeps all in relation and connection. She invigorates herself by continuous motion. In a similar manner the teacher should proceed. His work must begin at the proper time. He must prepare and arrange the matter of instruction. He should not try to plant cognitions with empty words, but let them

grow from the seed of sense-perception from within outwards. Outlines should precede the thorough treatise. All his procedures should be step-by-step motion, etc. In this way Comenius interpreted the term "teaching according to Nature's laws."

But a deeper conception of this principle is gained if we interpret it subjectively, to wit: Proceed in teaching as the nature of the pupil dictates. This is the way Pestalozzi and Diesterweg understood this principle. Not nature in general, but the nature of the particular human being to be taught, should guide us. In all our endeavors to assist the development of that human being, his own peculiar combination of natural gifts dictates what to do. Pestalozzi's own words are: "The course of Nature in the development of the human race is immutable. There can be no different good ways in teaching: there is but one good one, and that is the one which is strictly in accordance with Nature's unchangeable laws."

The teacher, as is now generally understood, even by a "pupil teacher" in the backwoods, has the duty to assist the process of development by suitable measures, commonly called teaching; and to that end he must know the natural laws of mental development, because his work will be fruitless if he violates them. These laws are found in the science of psychology if we refer to the pupil or subject; they are found in the science of logic if we refer to the matter or object of instruction.

The principle, "teach according to Nature's laws,"

is the most important in the science and art of teaching. All other principles are contained in it like germs. But as a principle of its own it is too general, too indefinite, to make it a rule for the practice of teaching. We must therefore proceed to more particular and definite ones.

NOTE. — We say teaching is an art, and therefore in teaching we find the same relation which exists between Art and Nature in general. First, Art imitates Nature, and borrows its ideal models from her; but it is also subject to Nature's unalterable laws, particularly those laws which govern the matter used in Art. Thus the art of painting is subject to the laws of light and perspective, architecture to the laws of gravity, music to those of sound; and it is literally impossible to deviate from them. According to Comenius' interpretation, the teacher is to be Nature's *imitator;* according to Diesterweg, he is Nature's *servant.*

II. TEACH IN ACCORDANCE WITH PSYCHOLOGICAL LAWS.

TEACHING will be agreeable to Nature's laws if it is done psychologically, that is to say, if it has proper regard to the laws of psychological development of the human mind. To this end it is necessary to regard the whole human being, and not merely a certain faculty. The instructor must stimulate all the powers of the soul; not merely develop the memory for instance, or the imagination, or the intellect, alone, but also the emotions. Another postulate is, he should start from the standpoint of the pupil, and proceed from the known to the unknown. Similar maxims, equally important,

are: Proceed from the easy to the more difficult, from the near to the remote, from the concrete to the abstract, from the particular to the general, from the example to the rule, from the object to its symbol, from the idea to its name. Do not use words that convey no idea as yet. This is the procedure known in methodology as analytic and genetic procedure.

The starting-point of the earliest instruction will always remain that range of experience which the child gains before it enters school; the starting-point in every higher grade is on that level to which the pupil has been raised in the preceding grade. This secures continuity of instruction, one of the requisites of success.

If the teacher were to disregard the standpoint of the pupil in any grade of the school curriculum, he would be in danger of either offering him knowledge as new which he has mastered before, or presupposing unknown things as learned, digested, and assimilated. In the former case the teacher would become tedious; in the latter, incomprehensible. To give the argument concerning psychological laws in a nutshell, we will say, the instruction should be in strict accordance with the actual stage of development of the learner, at every step and at all times.

NOTE 1. — Of the particular rules given for psychological procedure, only the first, namely, "from the known to the unknown," is applicable in every case. The recent crusade in New England against this maxim is too trifling to be considered. The other maxims are subject to limitations. Thus, it may

happen, that an easier part of a branch of study may follow a more difficult one; for instance, the chapter in geometry which treats of circles follows the Pythagorean problem. In many sciences the elementary ideas and fundamental definitions at the beginning of the study are the most difficult. While the rule says, "Proceed from the near to the remote," it is very frequently the fact that the more remote, in geography for instance, is treated before objects nearer home. The sun, which is a very remote object, is spoken of and viewed before Australia is treated; and in history, knowledge of the Orient is frequently offered before home history is treated. But no man of common sense will on that account object to the rule as it stands.

NOTE 2. — The oft-quoted maxim, "from the simple to the complex," cannot be supported, because that which is gained by experience through the senses is not always simple. The more difficult general ideas are simpler than the particular ones gained by observation.

III. TEACH OBJECTIVELY; APPEAL TO THE SENSES.

THE maxims derived from the second principle, all more or less peremptorily demand this: "Teach objectively." Sensations and percepts are the building-material of concepts, cognitions, and ideas. The young child's range of experience, its mental horizon, is literally filled with percepts, few of which have been formed into concepts. The young child's mind is only capable of sensation, perception, and conception. That which is perceivable by the senses is that which is nearest, easiest, simplest. Hence the principle, "Teach objectively," is correct at least for elementary instruction.

But it holds good also for every other step of in-

struction: for ideas without percepts are empty and meaningless; they are garments without substance. Whenever new terms come up in instruction, the teacher should at once see to it that they are illustrated aptly, so that they are substantiated, so to speak, and organically linked with previous cognitions.

This was doubted by a young teacher, one day, in my presence; and I led the doubter *ad absurdum* by asking him whether he thought pumpernickel should be recommended in a case of gout? A blank stare was the answer, until finally his question, "What is pumpernickel?" broke the spell and his doubt. Such words as "arsenal," "tributary," "elevation," "constellation," and other words of Latin and Greek origin, do not convey a meaning unless an appeal to the senses or to ideas previously acquired has been made. The difficulty and want of success in teaching often results from the fact that the teacher is too abstract, that words are used for which the child cannot find objects of comparison or contrast in his "picture-book of experience," his memory.

The objective teacher illustrates all new terms as far as possible, either by showing the objects *in natura*, or by means of models, pictures, drawings, sketches, diagrams, so that the terms may leave a residue of sense-perception in the memory. All the impressions which we gain from an object by means of the five senses form an idea.

Thus, for instance, we have no clear idea of an apple unless we have perceived it through all the five senses.

We *see* its color and form; *feel* whether it is hard or soft, smooth or rough; we *taste* it, and thus find whether it is sour or sweet; we *smell* it, and distinguish, even when blindfolded, from the smell of a pear or plum. We even recognize it by the sense of *hearing:* an apple that rolls on the floor is recognized even by a blind person.

To objective teaching belongs also the example of the teacher, the showing how to work whenever accomplishments, such as penmanship, drawing, singing, etc., are the subject of a lesson. The teacher's copy on the board, his example in reading, drawing, narrating, translating, etc., all these may be considered as parts of objective teaching. Pestalozzi formulates the principle of objective teaching as follows: *Anschauung* (perception) is the absolute foundation of all cognitions; that is to say, all cognitions are derived from perceptions, and can be traced back to them.

IV. TEACH INTELLIGIBLY.

Teach intelligibly, so that you are easily understood. This principle demands that the acquisition and retention of the matter be made easy to the pupil. The teacher will be the more successful, the easier the pupil finds the act of learning.

Though all principles of teaching should aim at this, a few maxims may be gathered under this head.

1. Teach the elements thoroughly, for in them most of the difficulties are heaped up. Remember, all beginnings are difficult.

2. Proceed slowly; teach little, but be precise and exacting in your demands. Do not hurry unduly, and never forget to lead the child back to the elements of knowledge, so that all cognitions be organically connected with previously acquired knowledge. Niemeyer says: "Appear to lose time in order to gain it; do not proceed to the next step unless you are confident that the former has been reached."

3. Ideas should be illustrated by things and allusions to things lying within the mental horizon of the children. Comenius says, "A teacher is cruel who demands mental work of his pupils without previous explanation or drill resulting in the ability to do said work."

4. Keep within bounds in teaching. This is to be understood to mean, teach as little as possible for future oblivion. There are teachers who honestly strive to teach all they know. Beginners fall into this error quite frequently. Goethe says, "*In der Beschränkung zeigt sich der Meister.*" (A master proves himself such under restraint.)

5. Separate the essentials from the non-essentials. Point at the former, and in reviewing lay stress upon them only.

6. Arrange systematically — that is, logically and methodically — the matter of instruction in parts and steps, so that the pupil can proceed by degrees without making undue leaps or being kept back.

7. Proceed from the object to its symbol, from the idea to the word; never *vice versa*. Do not speak

of things of which the pupils have no conception as yet. Vainglorious talk in school is a crime. The language of the teacher should be simple, clear, comprehensible.

NOTE 1. — Like all the other principles, the foregoing must be accepted and followed with the limitations caused by the relation of these principles to each other. Making learning easy should not be interpreted to mean to cripple the enthusiasm or self-activity of the pupil. This would violate principle No. 7.

NOTE 2. — The maxim, "Make things comprehensible," should not lead us to exclude every thing the explanation of which is beyond a possibility. Many facts must be taken upon trust in childhood, as well as in later years. Even science cannot explain all known phenomena, and sometimes loses itself in useless speculations. All we can do is to classify these facts, and wait patiently, till by means of comparison and contrast a general law may be deduced, or cause and effect be discovered. Children often learn facts which remain totally uncomprehended by them, and we believe they are enriching their mind, while they only overburden their memory. Not much damage is done thereby, except that mental dyspepsia is caused by thus constantly storing up facts which are not linked with previous cognitions; while healthy growth is caused when the facts are digested and assimilated, that is, recognized in their intimate relation to others. The acquisition of uncomprehended facts is not necessarily vicious in its effects, so long as these facts are not in contradiction to cognitions gained previously. The uncomprehended fact may be true, though we do not see its causes and relations. For instance, we have not yet learned or comprehended how the grass grows, but there is no contradiction between the facts and the known laws of nature.

METHODS OF TEACHING.

DEFINITIONS.

METHOD, in general, is the mode of procedure which follows certain rules applied with the intention of gaining a certain end; or, "method is the way of reaching a given end by a series of acts which tend to secure it." Every practical performance may be conducted either *irregularly*, that is, *arbitrarily* and accidentally; or *regularly*, that is, *methodically*. In this sense we speak of a method of swimming, riding, painting, eating, etc.

Method of teaching is the mode of procedure in teaching which follows given rules. It is the way upon which the teacher leads his pupils in order to make them reach the ultimate aim of instruction. It is the answer to the question, "How should the matter of instruction be arranged and treated, in order to be comprehended, digested, and assimilated easily and willingly by the pupil?"

The answer to this question must of necessity differ as we refer to the (1) course, (2) form, (3) manner, or (4) means of teaching.

The *course of teaching*, frequently called method, is so far objective as it disregards the peculiar manner of the teacher, and may be applied to all teaching, since it has reference only to knowledge and accomplishment, that is, the *matter* to be taught, not to the varying conditions of the person to be taught. The

course of teaching, like the prescribed course of study, is soulless until interpreted and applied by a teacher who, by his form and mode of teaching, can animate it.

The *form of teaching* has reference to the outer procedure; that is, the mode of conduct and communication on the part of the teacher toward the pupil. For this part of method, also, very well-defined rules can be and are applied.

The *manner of teaching*, on the other hand, is purely subjective, since it depends upon the teaching person, and embraces the individual spirit of the teacher, his own peculiar manner, his own tone. Though this manner, strictly speaking, must vary with different individuals, there are still certain particulars which all have in common; and only so far as they are common to all or many, are they entitled to consideration in the following chapters.

NOTE. — It is with reference to this part of methodology that the greatest mistakes are made. Teachers often advocate a trick, a device, a peculiar mannerism, as a new method. They simply confound manner with method of teaching.

The *means of teaching*, lastly, are objects of nature, artistic representations, books, charts, apparatus, etc., used to assist the teacher in teaching, the pupil in learning. They are in intimate relation to the method pursued, be that inner or outer method of procedure; objective or subjective method; course, form, and manner of teaching.

DIDACTIC, HEURISTIC, AND SYSTEMATIC METHODS.

The didactic method is that procedure in which knowledge is communicated. This distinguishes it not only from the heuristic method, which aims at the self-active acquirement or finding of knowledge, but also from that procedure known as scientific presentation of knowledge; that is, the systematic method.

The heuristic method reflects the historic way by which the human mind has reached its present status of development. Since this way is by no means a straight line, but exhibits numerous errors and windings from which the short-lived individual must be saved, the method, therefore, deviates frequently from its historic model. It is the object of the teacher to lead the individual upon the shortest road, in a certain limited number of years, to a point which the human race has reached by a roundabout way during the long course of many centuries.

To this shortest road the systematic method seems to commend itself most, because it arranges all cognitions according to their inner, that is, logical, relation. It is that presentation of knowledge of which the mathematics offer brilliant examples or models. But this strictly systematic presentation, with all its definitions, divisions, classifications, and conclusions, is only suited for riper minds, for the highest or academic grades of school instruction, and not applicable in the lower grades, because it totally disregards of necessity the learner's individuality.

The method of teaching, then, — that is, the way in which the mind is to be approached, and the manner in which the matter of instruction is to be served, — must be guided by two considerations: first, the consideration for the subject of instruction, the pupil; and this is the psychological side of instruction, the aim of which is to make the pupil susceptible to the matter of instruction; second, by the consideration for the objects of instruction, — that is, the nature of the matter, — and this is the logical side of instruction, which aims at preparing the matter; that is, making it palatable and digestive for the mental organs of the pupil.

In all elementary teaching the first consideration is weightier than the second, although the latter should not be disregarded. In academic instruction the second consideration is the more important.

NOTE. — A teacher of young pupils who disregards the psychological standpoint of the children, and lectures over their heads, as it were, is an abomination. That such "teachers" are not rare, can be seen from the often-repeated phrase, "Now, how often did I tell you that, and yet you do not know it!"

THE ESSENCE OF METHOD.

Since the teacher cannot, for obvious reasons, teach at once all the course of study prescribes, he is obliged to divide the matter, and proceed step by step. The disposition of the matter of instruction into a series of lessons, according to the time prescribed, is the course.

Every lesson should form a methodical unit, having a previously determined object in view. In the pursuit of this object, five stages must be distinguished: —

I. The *preparation;* that is, a repetition of what is known by the pupils of the matter under consideration.

II. The *presentation* of the new; that is, that with which the pupils are to be made familiar. This may be either given, or found by self-active investigation.

III. *Connection* of the new with cognitions previously acquired, so that, for the purpose of apperception, repetition and practice become necessary.

IV. *Condensation* of general results obtained from examples and illustrations, and their formulation into good language or set rules, as the case may be.

V. *Application* upon examples and cases of practical life, so that what is learned may become the undisputed property of the learner, over which he has absolute command and control, at any time, and under all circumstances.

The course is by no means an indifferent thing, for much depends upon the order in which knowledge is presented to the learner, so that its component parts are thoroughly comprehended. The course, indeed, is so frequently considered as *the* method, that it leads many to an erroneous conception of the term "method," as we shall see farther on.

In the comprehension of the child, the matter of instruction must be so arranged that every following new cognition can be linked to previous cognitions. No fact must stand isolated; but must form, in con-

nection with many others, an organic unit. That this depends upon the disposition of the matter, is clearly seen.

NOTE 1. — A confused mass of knowledge offered, is the diametrical opposite of method. Life teaches in that way, and forms a chaos of cognitions and experiences. When the pupil comes to school, it is the teacher's duty to disentangle this ratking of cognitions, and establish order in the mind. Some people, notably auto-didactic scholars, never succeed in establishing order in their minds : their ideas are never clear. The greatest art in teaching consists in descending to the standpoint of the child; to become a child among children, and unconsciously lift them to a higher level. He who can practise this great art needs not method. He is method personified; that is, proceeds methodically without being aware of it, and without making his pupils feel it.

NOTE 2. — The course of teaching referred to in this chapter must not be confounded with the course of study as prescribed by school authorities. It is the guide of the teacher's own action from step to step.

ANALYSIS AND SYNTHESIS.

The method, or the road upon which teacher and pupils travel, is conditioned both by the starting-point and by the end in view. The starting-point in teaching is generally within the circle of experience and horizon of knowledge of the pupils. The teacher must begin here, lest his teaching be fruitless and useless. He cannot always know the extent of this circle, and, therefore, is obliged to explore it to know just how high or how low the pupil stands.

Whatever the teacher finds within this circle of expe-

rience will either appear as a *whole*, which may be analyzed into its component parts; or as a number of parts, which will have to be linked organically to form a whole. The method may, therefore, take the form of dissection or dismemberment (*analysis*), or it may take the form of combination or joining (*synthesis*), of the matter. In the former case we call the method analytic; in the latter, synthetic.

Now, the whole spoken of may be concrete or abstract; that is, it may be a real thing, an object existing in time and space, or a mere notion, an idea, or, to speak more accurately, the contents of an idea. According to this, analysis, as well as synthesis, may be twofold: namely, real, when it refers to the object itself; or ideal, that is, logical, when it refers to a conception or idea.

Analysis of the object will furnish component parts which lie side by side when dismembered; analysis of the idea brings out the characteristics within each other, and which, with regard to the original idea, are higher or lower concepts. Object-analysis is a real partition or dismemberment of an object, while thought-analysis is a logical abstraction.

Object-analysis dissects: a tree, for instance, into roots, trunk, branches, twigs, leaves, and fruit; a horse, into head, neck, trunk, and extremities; a year, into seasons, months, etc.; a product, into its factors; a sentence, into its elements; a word, into syllables and sounds.

Object-synthesis combines the parts of an object in

order to produce it in its original form: thus, the different provinces or states, to form a union or empire; the prismatic colors, to form the rainbow; continuous adding of one, to make any number; single acts, to form a period in history; plants showing similarity and relationship, to form families and classes in botany.

Object-analysis finds application everywhere, where any real object within the child's circle of vision and experience is to be explained by partition into its component parts. He who thinks of the whole, thinks also of the parts; but the latter often remain obscure, and can only be understood by the analytic method.

Thus, for instance, in the branch of instruction commonly called object-lessons, the child has a great multiplicity of concepts grown out of a still greater number of percepts, but they are mostly all obscure. Many a child has seen horses, and has no clear idea of a horse's hoofs and joints. This partition and distinction is caused by the analytic method.

In the same manner, the well-known home may be made the object of object-analysis; certain projecting points, hills, rivers, bridges, settlements, cities, etc., may be singled out, and viewed according to their relative position and size. On the other hand, certain parts may be made starting points, and the whole the end in view. This is the case when the parts are that which is given by experience, and the whole that which is to be gained. This naturally calls for object-synthesis.

The attempt to extend geographical knowledge beyond the horizon of the home calls for object-synthesis. This necessitates the use of imagination, in order to form the parts to something like a complete thing. Complete maps need to be analyzed; outline maps require synthesis. A very popular method of historical instruction is that of object-synthesis, namely, a linking of facts which follow chronologically.

Reading and arithmetic were originally taught by means of synthesis exclusively (by adding sounds to make words, and adding numbers to obtain others). In reading, the so-called phonic, or sounding-method, proceeds synthetically; the word-method, analytically. The best mode in this case will always be a combination of the two; that is, to analyze words to obtain the material with which new words are made. The first year's work in arithmetic also should be analytic, as well as synthetic. Every new number should be obtained by synthesis, and then analyzed into its component parts and thus measured. (See Grube's procedure.)

And thus I might go through the whole range of studies to show that the teacher can apply analysis and synthesis equally well. It will never do to exclude one, or even unduly favor the other.

SUMMARY OF METHODS OF TEACHING.

INNER PROCEDURE, OR THE METHOD OF TEACHING

WITH REFERENCE TO

I.—THE PUPILS.

The method may be
Dogmatic,
or communicating,
whereby is or are taught

all. — *only principles.* — *main points.* — *fragments.*

In this case instruction is *systematic.*

In this case instruction is *elementary.*

The popular *lecture* comes under this head.

Aphoristic, and accidental or incidental instruction.

Or it may be
Genetic,
that is, developing,
and then it is either the

Elementary genetic or ***Socratic***[1] method.

[1] The Socratic method is applied in the inner as well as in the outer procedure. See below.

WITH REFERENCE TO

II.—THE MATTER OF INSTRUCTION.

The method may proceed from

the whole,
Analytic Method,
that is, from

the *object,* and then it is real-analytic, ***Explanatory*** procedure.

or the *idea;* and then it is ideal-analytic, ***Inductive*** procedure,

the parts,
Synthetic Method,
that is, from parts of

the *object,* and then it is real-synthetic, ***Progressive*** procedure.

or the *idea;* and then it is ideal-synthetic, ***Deductive*** procedure.

OUTER PROCEDURE, OR THE MANNER OF TEACHING;

that is, the mode of intercourse. It may be

Monologic,
when one speaks, and others listen.
Lecture.

1. acroamatic.
2. mechanical.
3. dictating.
4. task-setting.
5. demonstrative.
6. tabellaric.

Dialogic,[2]
when teacher and pupils converse with little restraint.

Socratic. Parliamentary.

[2] Catechetic and dialogic modes readily blend.

Catechetic,[2]
when one asks, and others answer,

repetitory questions, examinatory questions, developing questions. (Heuristic.)

CHAPTER V.

THE ART OF QUESTIONING, AND PRACTICE OF TEACHING.

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THE ART OF QUESTIONING, AND PRACTICE OF TEACHING.

HINTS TO BEGINNERS.

Let me draw from my experience in the school-room, and offer young teachers, a few hints regarding the art of questioning, as it should be applied in the primary school, where above knowledge and its garment, above skill in making use of it, should be considered the growth and development of the child's inborn powers. Indeed, the primary school has performed its duty, when it has taught its pupils to teach themselves.

First, Then, let me say, it is well to let individual pupils answer your questions, for only thus it is possible to learn the faults and failings in the knowledge and language of your pupils. Direct your questions to the class, but call upon individual pupils to give the answers. If an answer proves to be perfect, call upon the class to repeat it in chorus. Thus you will be aiding the whole class in acquiring correct knowledge, clothed in fitting garment. Much is sinned by having the whole class answer *ad libitum*. This resembles a bushel of chaff containing a few grains.

Second, As a most excellent exercise, may be regarded the writing of a few perfect answers to some leading questions, either by the teacher or by the pupils. Thus another means is used for fixing in the mind that which has been developed in the preceding lesson. We are apt to forget that it is not so much knowledge, as it is ability and power, toward which we should aim. If this writing of a few answers is begun early, it may lead to accustom the children to express their thoughts in writing more readily than is done commonly.

Third, This, however, is only possible if the teacher insists upon it, that the pupil's answer should in every case consist of a complete sentence, which embraces the teacher's question. I know full well that this has been termed pedantic; but no one thus far has succeeded in proposing any thing better for the purpose of facilitating clearness of expression, and exercise in correct speech. Many teachers hold, that insisting upon the pupil's answer being a complete sentence is a waste of time. It is true, in the beginning it claims much valuable time, like every other thing which is taught thoroughly; but after some weeks it will be found a downright saving of time, because time in school is saved easiest where the answers are the garment of the most thorough and complete thoughts. Fragmentary answers will not allow the class to follow easily, and the language of the pupils will not be facilitated. I believe a few weeks will accustom a class to answer in complete sentences.

Fourth, Of course he who has no tact in questioning, or who asks questions that are faulty in construction or poorly emphasized, will get poor and incomplete answers. The teacher's questions in the primary school must possess *three absolutely necessary qualities*. They must be *correctly formed*, must be *precise*, and must be *true* questions.

What question is correctly formed? Every question which has the interrogative word at the beginning, that is to say, which begins with "how," "where," "when," "who," "what," "why," or another interrogative pronoun. Ask, "*Where* does the squirrel live?" and not, "The squirrel lives where?" Such questions are as little instructive as is the practice of beginning a sentence, and having it finished by the pupil; as, for instance, "The swallow builds its nest near"—"the window." There is, however, little danger of faulty construction in English: much more so in other languages, where much depends upon correct construction.

What is a precise question? A question is precise if it admits of but one answer, as a good riddle will have only one correct solution.

What is a true question? Every question of correct construction, which is not only precise but well emphasized. He who asks, wishes to learn something that he does not know as yet. In school, therefore, the pupils ought, by rights, ask, and the teacher answer. But since this is impossible, for obvious reasons, the teacher exchanges position with the

pupils, and artificially places himself in the position of him who does not know what is asked for. The less the teacher betrays that he knows what he asks, the more will his question be a real, genuine question, and the more readily will the pupil answer. Now, since this make-believe is only possible through correct emphasis, it is obvious that we should lay much stress upon this particular quality of a good question. I have met with teachers who are perfect masters in the art of questioning, and it is not astonishing at all to hear the brilliant answers of their pupils. No better proof of a teacher's mastership in this art was ever given, than by that conceited little boy, who came home from school and said, "I ain't a-going to that school any more." — "Why?" asked his mother. "'Cause our teacher don't know any thing. She asks us all the time. We must tell her every thing. To-day she even wanted to know what I had my boots on for!"

There is one more requirement of a true question: namely, it must never be uttered in a tone, and accompanied by a mien, from which the child is to imply that the teacher has doubts in the pupil's ability to answer. Be sure even children, who are little sensitive, feel it, and weak ones are discouraged thereby. Confidence begets confidence. A teacher who is anxious to perfect herself in the art of questioning will do well, in case she receives no answer, to look for the cause in the nature of her question. If she finds that it is correct, she may perhaps find the cause in the want

of connection with the previous answer. Sometimes logic requires a connecting link; sometimes it will suffice to repeat the previous answer. Whatever the reason of her want of success may be at the beginning, she should not lose her patience, for patience is a requisite of success in applying the developing method in the common school.

THE SOCRATIC METHOD.

It has been my enviable pleasure in life to be a member of a board of examiners. Grammar, and theory and practice, were among the branches assigned to me. I hardly ever resorted to a set of cut-and-dried questions, but almost invariably called for a composition upon a practical question concerning school work. That composition would suffice to reveal the examinee's knowledge and skill in the use of the language, and in many cases it also revealed sufficient knowledge in pedagogy to warrant the issuing of a certificate.

One day a number of normal-school graduates presented themselves for examination, accompanied by a few teachers of several years' practice. As a subject for composition, I gave out, "How to ventilate a schoolroom." I do not know what motive prompted me at the time, but I recollect to have given the order that the composition was to illustrate the Socratic manner of teaching.

The experienced teachers "threw up the sponge" at once, saying that they had prepared themselves for an old-fashioned examination, and were ready to

answer a set of matter-of-fact questions in each branch, as had been the custom; while the young ladies from the normal school quietly went to work without grumbling. It is queer, but undeniable, that the faithful discharge of duties in the schoolroom on the part of the teacher is liable to make him distrustful of himself and his accomplishments. The result of this examination showed that the experienced teachers all more or less satisfied me, while the young damsels all more or less failed in the attempt.

Now, I wish it to be understood, that I do not say this to discredit the good work of the normal schools. Far from it, being a normal-school man myself. But this much I wish to emphasize, that experience in the schoolroom is the best normal school I know of. Alas! it has to be maintained and supported at the expense of the little children with and upon whom the young teacher is experimenting. One of the compositions then furnished within the short space of an hour I wish to reproduce here. I give it with all its errors and shortcomings. It illustrates that experience is the best teacher, after all.

VENTILATION IMPLIES CIRCULATION AND AGITATION OF THE AIR.

[*A composition exhibiting the Socratic Manner of Teaching.*]

Question. — What is the purpose of the stove in this room? *Answer.* — It is to heat the air in this room.

Q. — Will the stove straightways send the heat into the farthest corner? *A.* — No, it will heat the air in its immediate neighborhood first.

Q. — What will the air thus heated do? *A.* — It will rise to the ceiling.

Q. — Why will it do that? *A.* — It is lighter than cold air.

Q. — Can you give another proof of the fact, that light gases or fluids rise, while heavier ones fall? *A.* — Yes: if water is poured into a glass half full of oil, we will see that the water, being heavier, settles on the bottom, while the lighter oil rises to the top; and that holds good also with air and other gases.

Q. — Now, then, if the heated air rises above the stove, what does the cold air farther away from the stove do? *A.* — It will press forward and take the place vacated by the hot air. There will be a constant current of cold air near the floor toward the stove, and a constant rise of hot air upward.

Q. — When will this current be slowest? *A.* — When the air is pretty evenly heated in the whole room.

Q. — What would have to be done to cool the air off, in case it became too hot to be comfortable? *A.* — Well, the source of heat might be diminished by shutting off the draught of the stove.

Q. — Are there other means for decreasing the heat of the air in the room? *A.* — Yes, by letting more cold air come into the room through the windows.

Q. — Where would you open the windows, below or above? *A.* — Of course, below.

Q. — Why? *A.* — So that there may be a fresh supply of cold air streaming toward our source of heat, the stove.

Q. — Would you not also lower the upper sash, so as to let hot air escape? *A.* — Yes, I believe that would be best.

Q. — Would you lower the upper sash just as much as you would raise the lower? *A.* — I believe it would be better to raise the lower sash less than the upper is lowered.

Q. — Why? *A.* — The cold air, being heavier, would press in with more force than the hot air could escape.

Q. — What is the influence of heat upon matter? *A.* — It expands matter.

Q. — Does it do the same with air? *A.* — Certainly, air being matter. And for this very reason it would be better to give the hot air more room to escape, than to the cold air to enter.

Q. — We will not discuss that matter further. But tell me, is the necessity for cooling the air the only reason for letting in fresh air? *A.* — Well, no: I think the oxygen in the air gets absorbed by so many lungs as are present in a schoolroom, and a fresh supply ought to be provided by a constant current.

Q. — But would it not be rather uncomfortable to those persons sitting near the windows, to be subjected to the draught of the cold air? Would it not be injurious to their health? *A.* — Yes; but I think that might be obviated by letting the cold air in at a place where it would least incommode the persons in the room.

Q. — Where could that be? *A.* — As near the stove as possible.

Q. — Now, then, state how you would arrange the windows. *A.* — I would *raise* the *lower* sash of that window which is *nearest* the stove, and I would *lower* the *upper* sash of that window which is *farthest* away from the stove.

Q. — What purposes would be reached by doing so? *A.* — An even current of fresh air would be occasioned thereby, which would not only bring new oxygen into the room, but would carry off the foul air; and, besides, it would secure an even temperature.

TWO EXAMPLES OF SOCRATIC QUESTIONING.

THE first is an imitation of Socrates' manner of conversation, by Dr. Watts, which is here reprinted for the sake of illustration.

"If you would lead a person into the belief of a future state of reward and punishment after life, you might begin in some such manner of inquiry as this, and suppose the most obvious and easy answers: —

Question. — "Does God govern the world?" *Answer.* — "Surely, he who made it governs it."

Q. — "Is not God both a good and righteous governor?" *A.* — "Both these characters doubtless belong to him."

Q. — "What is the true notion of a good and righteous governor?" *A.* — "That he punishes the wicked and rewards the good."

Q. — "Are the good always rewarded in this life?" *A.* — "No, surely, for many virtuous men are miserable here, and greatly afflicted."

Q. — "Are the wicked always punished in this life?" *A.* — "No, verily: many of them live without sorrow, and some of the vilest of men are often raised to great riches and honor."

Q. — "How, then, does God make it appear that he *is* good and righteous?" *A.* — "I own, that there is little appearance of it on earth."

Q. — "Will there not be a time, then, when the tables shall be turned, and the scene of things changed, since God governs mankind righteously?" *A.* — "Doubtless, there must be a proper time in which God will make that goodness and righteousness to appear."

Q. — "If this be not before their death, how can it be done?" *A.* — "I can think of no other way, but by supposing man to have some existence after this life."

Q. — "Are you not convinced, then, that there must be a state of reward and punishment after death?" *A.* — "Ah, yes! surely, I see now plainly, that the goodness and righteousness of God, as governor of the world, necessarily require it."

The following example may show that it cannot but please a child to be taught in the way indicated: —

A boy, ten years of age, once applied to me, saying, "I was told the earth was round as a ball.

I think I ought to believe it, for it was our teacher who told us; but she said she was going to prove it after we had tried to find proofs ourselves. Now, how am I going to find them? Will you help me?" The following conversation ensued: —

Question. — "What form will the shadow of this book have if I hold it between the light and the wall?"

Answer. — "It will be a four-sided [rectangular he meant] shadow."

Q. — "What form will the shadow of this pencil have?"

A. — "Something like a thick, straight line."

Q. — "What form does the shadow of any object take?"

A. — "Why, the same form that the object has."

The reader will please notice that here was a fine opportunity to get off the track. If I had stopped to correct this statement, and had gone into the domain of an artist, I should not have reached my purpose. So, of course, I left the statement intact, and went on: —

Q. — "Is the earth a body that could throw a shadow?"

A. — "Yes; and a mighty big one it would be, I should think."

Q. — "Have we ever an opportunity to observe its shadow?"

A. — No, there isn't any wall."

Q. — "Well, there is no wall on which the shadow could fall, but are there no objects in the sky that might be put into the shade if the earth should chance to get between them and the sun?" *A.* (after some reflection). — "Yes, I remember having heard that the eclipse of the moon is caused by the shadow of the earth."

Q. — "What form had the earth's shadow on the moon?"

A. — "I remember having seen it twice: the shadow was round [circular he meant] both times. Is it always so?"

Q. — "Yes, whenever it appears, it exhibits either a part of a circular round or a perfect circle. But tell me what bodies

always throw a circular shadow." *A.* — "Balls or spheres do that. Oh, now I see, yes! the earth must be round like a ball: it must be a sphere."

Q. — "But suppose that you take a plate: would not that too, if held in a certain position, throw a circular shadow?" *A.* — "Yes, that's so."

Q. — "Would it always do that, no matter how you held it between the light and the wall?" *A.* — "No, if you held it a little sideways, it would throw an oval shadow; and if you held it so that the light struck the edge only, the shadow would narrow down to the shadow of a pencil."

Q. — "Does our earth ever throw another shadow than a circular one?" *A.* — "No: as often as I saw it, and as others observed it, the shadow was always circular."

Q. — "What, then, do you learn from this fact?" *A.* — "Since the shadow of the earth upon the moon is always circular, and only balls or spheres can throw a circular shadow always, I see in that a proof that our earth is a sphere."

I then went on and questioned the boy with regard to the fact that the earth has hardly ever the same position between the two heavenly bodies, sun and moon, and that, therefore, we could positively assert that the form of the earth could be nothing but a sphere.

HOW THE MIND GROWS.

It is a well-understood and convenient phrase to say the mind grows in concentric circles. The horizon of the child grows more extended as it gathers knowledge and experience, just as its horizon of vision grows more extended in proportion to the growth of the body. The baby's horizon consists of the four walls of the

nursery. The young child's horizon is bounded by the garden wall or the neighboring street. That of the child in the primary school is apt to be bounded by the limits of the town or city; it is only in rare cases that the geographical horizon of a child extends beyond the

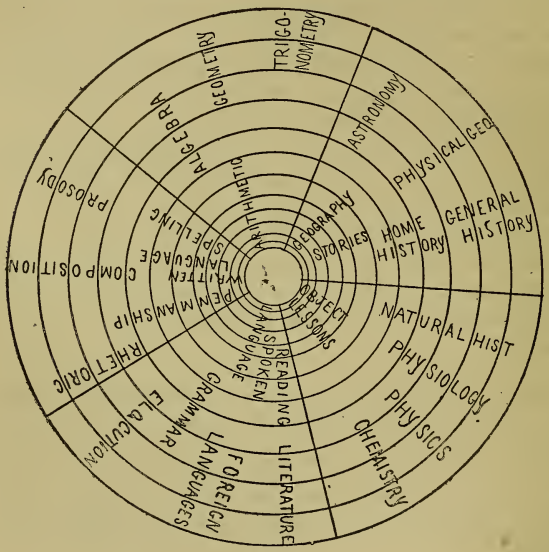


Fig. 1.

native city or town by the aid of imagination. The horizon of a thorough student of geography and astronomy is literally boundless.

The course of study affords an illustration of this concentric growth of the mind, inasmuch as it arranges all studies concentrically. (See Fig. 1.) Here we notice, that what are object-lessons in the primary

grades become natural history, physiology, physics, and chemistry in the upper and highest grades. The exercises of the child in number in the primary grade contain all the germs of the higher mathematics, and the child who measures the area of a triangle or trapezium lays a good foundation for the study of geometry or trigonometry. I need not further enumerate the studies, or show how the mental horizon is widened in ever larger and larger circles. The foregoing illustration explains the matter fully.

In justice to myself I will say that the arrangement of the branches of study given in this cut is not to be regarded as final, or even a correct copy of what may be found in the different courses of study. The latter vary in many instances. It is my object to merely show the principle underlying the course of study; namely, every well-arranged course of study presupposes mental growth in concentric circles. The yearly rings may differ in width also.

And after the reader has contemplated the illustration sufficiently to see what it signifies, let him cast a glance at Fig. 2.

This is to represent how erratically Nature executes the wonderful plans of the course of study. See how she causes protuberances and indentations. Notice how the child, in one year, rushes forward in one branch, and seems to make no headway in others. This cut is not to be interpreted as representing the results of Nature's work in every case. It is merely a fair sample of Nature's work as it is when it leaves the

hands of the teacher after a twelve-years' course of school education. The harmonious development of all the inborn faculties of mind, heart, and body, is a beautiful and touching phrase; but, I am sorry to say, nothing but a phrase.

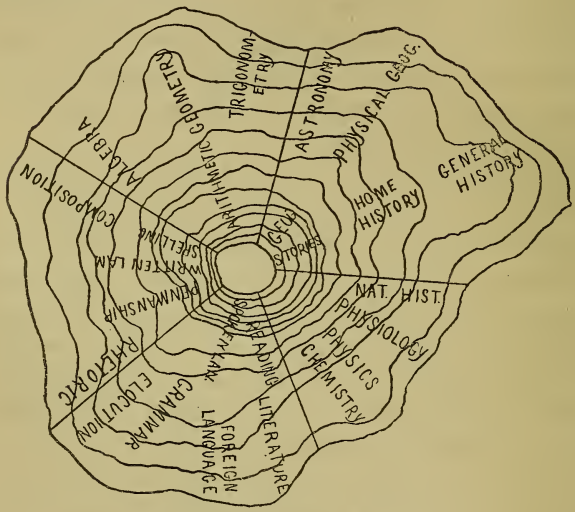


Fig. 2.—"A" Possible Result.

Nature offers many examples of similar procedure. Look at the annual rings of a tree. The first few rings around the heart are almost mathematically correct; but, as the tree grows thicker, protuberances and indentations are seen, often resulting from very insignificant causes. The bite of an insect, the bending of the trunk before the storm, a slight abrasure, and similar causes, may lead to an irregular growth.

Similar trifling causes may warp the mental course of a child, and make it irregular. The love or the hatred of a teacher may give rise to an enthusiasm or an indifference in the pursuit of a certain branch of study, and at once we will see either great progress or retrogression in the branches he or she teaches. A few mild words of approbation or commendation may prove a strong impetus, while a severe punishment or superfluous praise may cause the contrary. Lucky or unlucky unforeseen circumstances may influence the even and harmonious concentric growth of the child, and a very considerable bump or a hollow may be the result. We are much more children of chance than we are willing to admit.

From the illustrations it may also be seen that some branches of study stand in intimate relation to each other. It is common practice to divide the different branches into *linguistic* (such as pertain to language), *mathematical* (which, in the earliest stages of school-life are purely arithmetical), *scientific* branches (which in the earlier stages are object-lessons), and *accomplishments* (such as writing, reading, drawing, singing, etc.).

A REVIEW LESSON IN PSYCHOLOGY.

Our training class had a review lesson one day, of which I will give a summary, and will term it "The First Eighteen Years of Life." The diagram (Fig. 3) may serve as an illustration of the summary given.

Intellectual life widens its horizon with every succeeding year. This is indicated by the diverging

lines. The parallel bars signify the years. The double lines in the diagram, which mark the boundaries between the different grades of school, are not indicative of any real marked difference in treatment of either subject or object of instruction, pupil, or matter of instruction, but are given to point out a difference which is one only in name.

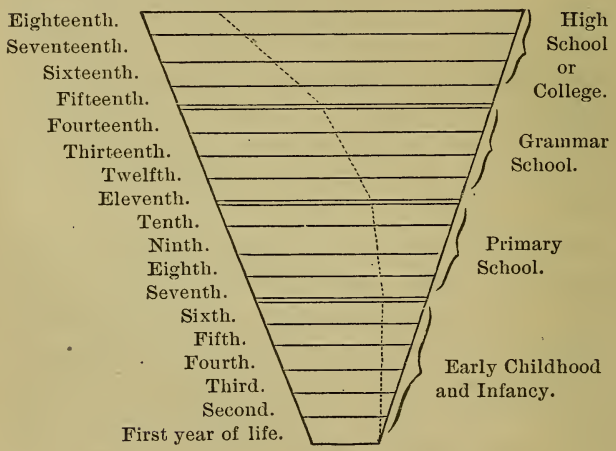


Fig. 3.

The first period of life is that of infancy and early childhood. The next four years are those of the primary school; the next four, those of the intermediate, often called grammar school; and the last four, of the high school or college. The dotted line, beginning in the first year, and running up in a curve, is to indicate a division between receptive and creative activity.

Thus we find, that in the earliest period of life the mind is receptive to a greater degree, comparatively, than in any other period. It is the *age of sensation*. Sensations are caused by the outside world, formed into percepts, and these latter into concepts. Percepts and concepts are stored up, and thus memory is created; but few, if any, clear ideas are formed.

A recent writer terms the two kinds of activity of the mind, sense-action and thought-action. Well, very little thought-action occurs in this period; but from the moment that the child enters school, the *age of observation* begins. The child's senses are trained, and it observes objects systematically, — their color, form, number, size, etc. The mental activity here is both receptive and creative, though not in equal proportion. The child learns to analyze and synthesize. All teaching in this period is done by means of objects or illustrations.

The next following period is the *age of abstraction*, in which receptive and creative activity of the mind are about equally divided. Symbols take the place of objects in teaching.

The last stage of school life may be termed the *age of reflection and generalization*. Research in every direction is indulged in, and self-activity is stimulated. Comparatively few new things are learned in this period of life. Cognitions previously acquired are verified; knowledge is systematically arranged; generalization and definition follow up the results of research and individual work. And if the student

enters a university, he goes even deeper into the mysteries of knowledge; but it is not necessary to follow him there.

The space on the left side of the dotted line, in the cut, is to indicate the amount of receptive activity engaged in during these years; the space on the right, the amount of reflective or creative activity.

It is not to be taken for granted that the life of every child that passes through our schools resembles this sketch. No two, on the contrary, are alike. The diagram is merely to show, in rough outlines, the principle underlying the manner of teaching in the different grades. This being a brief summary, it is not necessary to apologize for its sketchiness.

SEE, DO, AND THEN TELL.

My friend Principal C., of Cincinnati, and I, met one day in the train on the way home; and since we always "talk shop" when we meet, we were soon deep in a professional conversation which was highly interesting to me. Principal C. is not given to cant and small-talk; his conversation is invariably freighted with profound thought, and amusing as well as instructive bits of experience of school-life.

Said he on this occasion, "After reading all this interminable talk (pardon this incongruity) about methods, that now fills, if not the air, at least the spacious columns of our numerous professional journals, I ask myself with wonder and astonishment, Is there any thing else in that, or any thing better, than

is my mode of procedure, which culminates in this short, pithy, but withal comprehensive, rule: 'First see, then do, and then tell about it'? Boil down all that the advocates of modern teaching say about methods, and it will amount to nothing more than this: See, do, and tell."

"Yes, friend C.," said I, "undoubtedly you are right. Your *rule* is the gist and essence of many a sermon on the new education. As you and I, and unquestionably many others, understand it, it is a condensed code, comprehensive enough, and sensible enough, to satisfy any one who has caught the idea, that education is not a result, but an action, the result of which is culture; any one who knows that the human being is not outside but within nature, and therefore subject to the laws of natural growth. But, sir, are you aware that the laconic garment of your *rule* is the source of great danger? See how easily it is misconstrued."

"How so, friend K.? how can it be misconstrued? I'll grant that it may be misunderstood, but I doubt that it will be purposely misconstrued."

"Well, I have a certain ichthyosaurus of a schoolmaster in my mind (for whom you need not search very far), who would reply at once, if you pronounced your rule to him: 'That's exactly what I am doing. First, I make my pupil *see* the text in the book, that is, read it; then I make him *do*, by learning it *verbatim et literatim;* and lastly I make him *tell*, that is, recite it.' See, honey?"

"I declare, you are a veritable *advocatus diaboli*, brother K."

"I tell you, friend C., you may pronounce a new law of pedagogy, or formulate an old forgotten or disregarded law anew, one which is purposely trodden under foot for the better convenience of school-keepers, and the ichthyosauri and plesiosauri of our profession will prove to you, with an alacrity worthy of a better purpose, that it is 'exactly what they are doing.' They will denounce you as an impostor, because what you propose is 'nothing new.'"

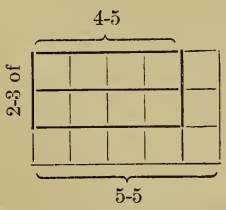
"Come now," said C., "I grant my pithy rule is not quite without its weak points. But I trust you do not interpret it wrongly. Let me hear how you would make this 'see, do, and then tell,' palatable to your teachers."

"My interpretation, briefly stated, would be this: —

"I. *See.* — All instruction in the common school should begin objectively; it should first appeal to the senses, and not to the eye only. To use a homely illustration: We do not fully know an apple, until we have not only seen, but tasted, felt, smelled, and even heard it (fall or roll on the floor). Every branch of study has a substratum of sense-percepts, from which will result those necessary primary concepts and ideas which, in turn, will form the solid foundation of sound judgment or reasoning. As the mighty Pike's Peak is formed by the aid of imagination out of a modest elevation near home, viewed by the child thousands of miles away from the peak, so, out of the

simple ordinances and enactments of a city council, the child will construe the law-making activity of the United States Congress. All the knowledge offered to the child is elementary. The very name of the schools indicates as much: they are elementary schools. The school of life will widen the child's knowledge; experience will build, upon the foundation laid in youth, a superstructure which will tower up as high as the foundation will permit. Make the first impressions deep, very deep, and they will be lasting ones. The text-book plesiosaurus is like unto the man who intends to make an impression in a wax cake, and who softly strikes it with a peacock-feather. He does not succeed with the first stroke; but patiently he repeats the stroke ten thousand times, and at last makes an impression visible to the naked eye. A sensible man applies a sledge-hammer, and lo! with one stroke he makes a deep impression. A direct appeal to the senses will make a deep impression. Therefore real objects brought into the schoolroom are more serviceable than illustrations; where their presence in school is out of the question, we may take the pupils out to them. Where all that is impracticable, illustrations or other imitative representations will serve better than mere verbal explanations or definitions. Give the pupils opportunities for seeing, that is, perceiving, observing, investigating, handling; let them not be satisfied with mere hear-say evidence as found in books, — and oh the wonderful impetus the child-mind receives!

"II. *Do.*—Perception leads over to concepts and ideas. The memory, being the receptacle in which the mind collects these concepts and ideas, offers material to the mind's creative power, imagination. Elementary or primary ideas gained by actual use of the senses are like seeds which grow and incite to action. A child who has *seen* that the three angles of a triangle are equal to two right angles, by applying the angles of a pasteboard triangle to a straight line, is not likely to rest content after that. The demonstration has something so overpowering about it, that the pupil will try and demonstrate other geometrical problems in a similar way. The result of this keen observation will make him do, act, work. Vivid seeing is the root of knowledge; action, its increase and application. By doing such an example as $\frac{2}{3}$ of $\frac{4}{5}$ [I mean, showing it by means of an illustration like the one in the margin], the child will gain knowledge of fractions, such as is not gained by mere 'figuring.' A pupil who thus learns is not a passive receptacle of book-wisdom. His knowledge is experience; he is a conqueror, and proud of his possessions. Certainly, the seeing alone will not create knowledge, nor will the doing alone do it; but both together will work miracles. And this leads me to the



"III. *Tell.*—When a child gains knowledge by keen observation and by skilful application, he is bound to

tell all about it. Like Pallas from the head of Jupiter, so a thought formed in the mind wrestles for expression. It is bound to be formulated. The proverb has it, 'Of what the heart is full, the lips will speak:' and you may as well substitute 'mind' for 'heart;' the proverb will hold good. However imperfect the child's language may be at first in the attempts at giving expressions to indigenous thoughts, the language improves wonderfully. The mere repetition of something committed to memory from the printed page makes only thoughtless prattlers; the more thoughtless, the more pretentious the words are that are committed."

"I like your explanation," said friend C.; "and it proves very forcibly how necessary is the vast amount of explanation and interpretation in the educational press. These journals are doing a noble work. We are only just beginning to learn the art of teaching. Let us thank our stars that we are permitted to live to see it done."

A PROOF POSITIVE.

While doing institute work some time ago, I gave a lesson in psychology, showing that the assimilation of thought progressed more favorably if new ideas were linked to previous cognitions, that is, cognitions previously acquired; that there was close affinity between certain items of knowledge and the memory, while the latter showed a decided hostility to others, which, in fine, it rejected as the stomach does cherry-stones. Naturally, I spoke less graphically than this,

elaborated upon my theme in philosophic terms, and noticed painfully that my words had little, if any, effect; they certainly did not strike fire. I found no response in the eyes of my audience, some of whom seemed slightly bored.

I paused, laid down my note-book, and cast about for a remedy. And then I had an inspiration which I quickly resolved to act upon. I dropped my subject "like a hot poker," as the funny fellow has it, and requested the audience to propose a few conundrums to me. Some moments passed in hesitation, and then, being urged a little by others, a young, sprightly teacher asked with a mischievous smile, "Why is a young lady like a door-knob?" I knew the answer; namely, "Because she is something to adore." This caused a ripple of laughter. I placed this question on the board.

Another of my hearers, a rather wealthy old lady, owner of several houses, who had been induced to be present at this afternoon's lecture, proposed this: "What intimate relations exist between a tenant and his landlord?" — "Parental relations." A venerable gentleman proposed this: "Why is a bald head like heaven?" — "Because there is no dyeing nor parting there."

Here I closed the list, and now showed that it was a handsome *young man* who remembered most readily a conundrum about a young lady; the *landlady's* memory was least sluggish in things which related to her "pay-rental" relations; while the *old gentleman*

quickly recalled a conundrum which reflected upon his billiard-ball skull. Are not these three facts illustrative of the psychological maxim I had stated, and which I then repeated? (See beginning of this article.) My audience laughed heartily: they understood now what I had aimed at. When I took up my theme I was listened to with undivided attention, and the sparks of comprehension visible in every eye were proofs positive of working minds which followed my train of thought. My lesson was a success that day.

CHAPTER VI.

ARITHMETIC.

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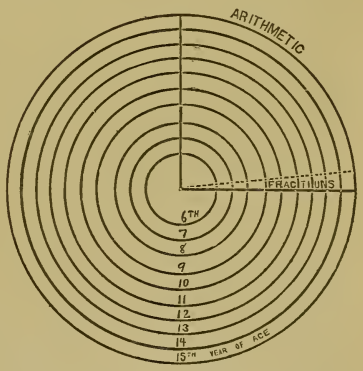
HOW TO TEACH FRACTIONS.

I START with the presumption, that the human mind grows in concentric circles, which, I admit, is nothing but a presumption; for Dame Nature is much too erratic to permit a mathematically correct expansion in every direction. Now, I claim an average of ninety degrees for numbers, *alias* arithmetic (this considerable portion of the child's horizon is claimed for argument's sake only: it varies with different children). And, within this one-fourth of the mental horizon, I claim at least ten degrees for calculations involving fractional numbers. (See cut.)



From this rather artificial exemplification we see that almost if not every part of arithmetic can, and ought to be, taught in the lowest grade of school.

We find that most young children know one-half and one-quarter. And this knowledge has been gained empirically; for instance, when mothers cut the pie at dinner. Where there are several children in a family, the younger ones learn the fundamental facts of fractions from the older children. This knowledge is not scientific, the child could not define the term "fraction" as yet; but it is clear enough for our purposes, which aim at a harmonious growth in every direction.

In the second year we introduce a few more fractions, such as $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{8}$. In the third year we use actual weights and measures, allow the pupil to handle them, and to "play store." These measures give us opportunities of introducing such fractions as $\frac{2}{3}$, $\frac{3}{4}$, $\frac{5}{8}$, $\frac{5}{6}$, etc., and we are not slow in making use of them. And so we go on widening the scope in the succeeding circles.

The regular instruction in the fundamental rules of fractions properly begins in the fifth year of school, while in most schools it does not begin till the sixth year (C grammar).

In the grades in which fractions are taught, illustrations of various kinds should be applied. I know of no better means than colored paper cut in squares of about four inches. It costs but a trifle, if the paper is bought by the quantity and cut into shape by any bookbinder or printer. For our purposes the squares would be greatly improved if certain lines dividing them into thirds, fourths, fifths, sixths, eighths, etc., were made *by perforating the paper*. Thus the process of folding could be done much more rapidly and accurately.

(*a*) REDUCTION.

Reducing to higher and lower terms is done thus: —

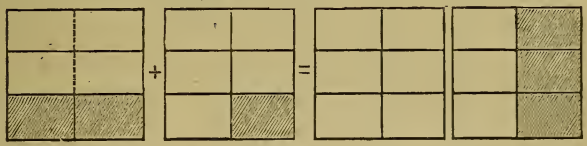
$\frac{2}{3}=\frac{4}{6}, =\frac{6}{9}, =\frac{8}{12}, =\frac{10}{15}.$

This illustration is so convincing that it speaks for itself. Any child will see the "true inwardness" and the mode of procedure in reduction of fractions, except one who cannot see through a barn-door even when it is wide open.

(*b*) ADDITION AND SUBTRACTION.

Adding and subtracting, and the necessary finding of a common denominator, is done in the good old-fashioned way, supplemented by such illustrations as the following: —

1. Example: Add $\frac{2}{3}$ and $\frac{5}{6}$.



$\frac{2}{3}=\frac{4}{6}$; $\frac{4}{6}+\frac{5}{6}=\frac{9}{6}=1\frac{1}{2}$.

2. Example: Subtract $\frac{2}{3}$ from $\frac{5}{6}$.

$\frac{2}{3}=\frac{4}{6}$,

$\frac{5}{6}-\frac{4}{6}=\frac{1}{6}$.

It is obvious, that I can show here only the bare outlines of my mode of procedure; but I covet an opportunity to show it as extensively as I do it in the schoolroom.

(*c*) MULTIPLICATION.

Here we have the following cases: —

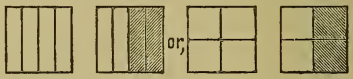
3. Example: $3 \times \frac{3}{4} =$ what?

$3 \times \frac{3}{4} = \frac{9}{4}$, or $2\frac{1}{4}$.

This answer can be made very obvious by taking two of the three fourths of the third sheet, and completing the first two squares; one fourth will be left over.

4. Example: $3 \times 2\frac{3}{4}$. This explains itself, being a repetition of $3 \times \frac{3}{4}$, plus 3×2.

5. Example: $\frac{3}{4}$ of 2 is also easily illustrated, namely, thus: Fold the two sheets in halves, which gives four fourths of two, and take three of them. Or, fold each whole into four equal parts, which gives eight fourths; then take three fourths of the first sheet, and three fourths of the second. Both give the same result.



6. Example: $\frac{4}{5}$ of $\frac{3}{4}$ is still easier, as it requires but one leaf. First fold it as it is seen in *a*, then as it is seen in *b*.

a *b*

Solution: $\frac{3}{4} \times \frac{4}{5} = \frac{12}{20} = \frac{6}{10} = \frac{3}{5}$.

7. Example: $\frac{3}{4}$ of $2\frac{3}{4}$ is plainly seen in the following figure. Take three whole sheets, cut off one fourth of the third. The arrow across the $2\frac{3}{4}$ indicates $\frac{3}{4}$ of $2\frac{3}{4}$.

Solution:

$\frac{3}{4} \times 2\frac{3}{4} = \frac{3}{4} \times \frac{11}{4} = \frac{33}{16} = 2\frac{1}{16}$.

8. Example: $3\frac{3}{4} \times 2\frac{2}{3}$, is a mere repetition of exercises similar to the preceding one, except that it takes more whole sheets to illustrate it.

Solution: $3\frac{3}{4} \times 2\frac{2}{3} = \frac{15}{4} \times \frac{8}{3} = \frac{120}{12} = 10$.

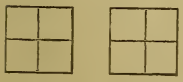
(*d*) DIVISION.

All examples in division of fractions can be illustrated by means of our paper squares. Take these cases: —

(1) $\frac{1}{4} \div 2$; (2) $\frac{3}{4} \div 2$; (3) $2 \div \frac{1}{4}$; (4) $2 \div \frac{3}{4}$; (5) $2\frac{1}{2} \div \frac{1}{4}$; (6) $2\frac{1}{2} \div \frac{3}{4}$; (7) $\frac{3}{4} \div \frac{3}{5}$.

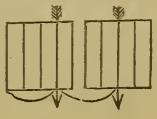
9. Example: $\frac{1}{4} \div 2 = \frac{1}{8}$. It is easily seen, that it is the same as taking $\frac{1}{2}$ of $\frac{1}{4}$.

10. Example: $\frac{3}{4} \div 2 = \frac{3}{8}$. What is done with one-fourth in example 9, is now done with three-fourths.

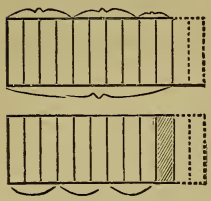


11. Example: $2 \div \frac{1}{4} = 8$. It means how many times is $\frac{1}{4}$ contained in 2 whole ones? Ans. 8 times.

12. Example: $2 \div \frac{3}{4} = 2\frac{2}{3}$. It means how many times are $\frac{3}{4}$ contained in 2? Solution: 2 or $\frac{8}{4} \div \frac{3}{4}$, or $8 \div 3 = 2\frac{2}{3}$.

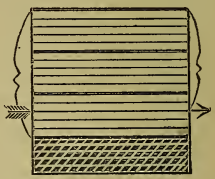


13. Example: $2\frac{1}{2} \div \frac{1}{4} = 10$. It means how many times is $\frac{1}{4}$ contained in $2\frac{1}{2}$, or $\frac{5}{2}$, or $\frac{10}{4}$? Ans. 10 times.

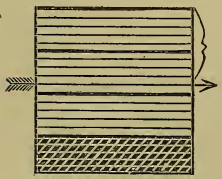


14. Example: $2\frac{1}{2} \div \frac{3}{4}$. It means how many times are $\frac{3}{4}$ of 1 contained in $2\frac{1}{2}$, $\frac{5}{2}$, or $\frac{10}{4}$? Ans. $3\frac{1}{4}$ times.

15. Example: $\frac{3}{4} \div \frac{3}{5}$. This means how many times is $\frac{3}{5}$ of a whole contained in $\frac{3}{4}$ of a whole? (It does not mean $\frac{3}{5}$ *of* $\frac{3}{4}$.) Solve it thus. Divide each strip, that is, each fourth, into five equal parts, and each fifth of the square into four equal parts; this gives us $\frac{12}{20}$ and $\frac{15}{20}$. Now it is readily seen, that $\frac{3}{5}$ is contained in $\frac{3}{4}$ as many times as 12 is contained in 15, namely, $1\frac{1}{4}$ times.



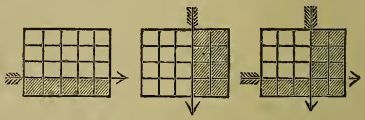
Solution: $\frac{3}{4} \div \frac{3}{5} = \frac{3}{4} \times \frac{5}{3} = \frac{15}{12} = 1\frac{1}{4}$.



The example $\frac{3}{5}$ of $\frac{3}{4}$ would be a different thing, as is seen from this illustration.

Solution: $\frac{3}{4} \times \frac{3}{5} = \frac{9}{20}$.

The following illustration serves to make the last problem still clearer. Here we have three strips across, or $\frac{3}{4}$ of a whole; then we have 3 vertical strips, or $\frac{3}{5}$. The arrows in the third square crossing each other indicate $\frac{3}{4}$ of $\frac{3}{5} = \frac{9}{20}$.



The reader will please consider, that all the intricacies of division in fractions cannot be treated in a short article like this. What I offer are only the elements.

Pupils who thus base their knowledge on a firm foundation of sense perception, and who are accustomed to solve problems in reality, not merely in figures, obtain a clear insight into fractional numbers, and never find difficulty in using fractions. My pupils do not "learn" — that is, commit — any rules first, and operate according to them afterward, but learn *to do* examples first. With them, rules are the results obtained from practice, by "seeing, doing, and then telling about it."

HOW TO TEACH PERCENTAGE.

In my article on fractions, I stated that the child's mental horizon grows in concentric circles, and that every department of knowledge and science can be, and virtually is, taught in the earliest childhood. Only, we must well understand that in this the child's action is a purely unconscious action: as, for instance, the child who learns the ideas one-half and one-fourth empirically, by seeing a pie cut; the child who learns familiar measures, as pint, quart, pound, ounce, yard, empirically, by using them at home, and when sent to the grocery on an errand; the child who learns a little later that one-half is equal to five-tenths; the child who learns that he pays six cents for the loan of one dollar, and similar things, — lays the foundation of all the departments of higher

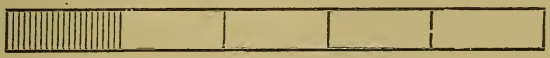
arithmetic quite early, without learning rules such as text-books prescribe.

The axiom, that new cognitions should be linked to those previously gained, should be borne in mind when attempting to teach percentage. Decimal fractions are taught by comparing them with vulgar or common fractions; and the main point to be impressed is, that the denominators of vulgar fractions may be different, while that of decimal fractions is only ten, or a multiple of ten. The same relation which is found between decimals and common fractions exists between expressions couched in the term "per cents." and others such as, "One is to five as twenty is to one hundred," one being one-fifth of five, and twenty one-fifth of one hundred.

In American schools all over the land, even where a more rational idea of grading pupils and their work has found an abiding place, the mode of marking on the scale of one hundred is not entirely gone out of vogue. While I denounce and condemn this mode unequivocally, I would prudently make use of the knowledge which the mode conveys. Despite Superintendent Marble's onslaught upon the maxim, "From the known to the unknown," I hold that it is better to build upon what the pupils know. They know that when they miss two words out of ten, their work must be marked eighty. They know that when they miss one out of twenty-five, they miss one twenty-fifth, or four-hundredths, and therefore their work is marked ninety-six.

The expression "per centum," of or from one hundred, is translated and explained. It is well to introduce the formal study of percentage with numerous questions in mental arithmetic: such as, —

1. Example: If you lose one out of five copper cents, what part of your money do you lose? Answer,



one-fifth. Express it on the scale of one hundred, or how many hundredths is that? Answer, twenty. In order to make this still clearer, I would draw a line, divide it in five equal parts, and shade one part. Then I would divide the same line in a hundred equal parts, thus showing them that one-fifth is equal to twenty hundredths or twenty per cent, and that twenty per cent is virtually the fraction one-fifth, expressed in higher terms.

2. Example: One-quarter of a pie is what per cent of the pie? Draw a circle representing the pie, divide it into four equal parts. (Make the pie large enough on the board.) Then divide each fourth into twenty-five equal parts, or the whole pie into one hundred, thereby showing that one-fourth is equal to twenty-five hundredths, or twenty-five per cent.

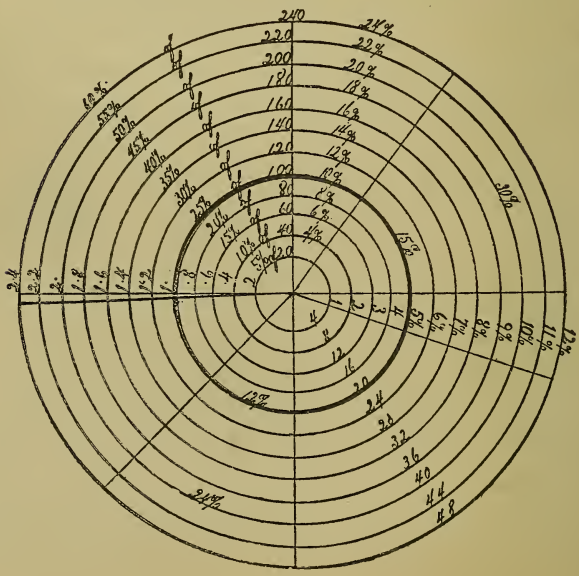
3. Example: Ask, if fifteen of sixty sheep are bitten by a vicious dog, and killed, what part of the

flock is killed? Clearly, one-fourth. Now, what is one-fourth of one hundred? Answer, twenty-five. Then the farmer lost twenty-five out of one hundred, or twenty-five per cent.

4. Example: If I buy a watch at eighty dollars, and sell it for one hundred, what per cent do I gain? I clearly gain one-fourth of what I paid for it, but one-fourth of one hundred is twenty-five; therefore, I gain twenty-five of one hundred, or twenty-five per cent.

These mental questions should be quite numerous. In order to facilitate this, I have resorted to the following very plain device, which speaks for itself.

(The 100 circle is the standard of measurement.)



I draw this figure on the board, and then ask in quick succession such questions as: —

(*a*) What is five per cent of 240? of 140? of 120? of 80? of 20? etc.

(*b*) Eight is five per cent of what? 10? 4? 1? 12? etc.

(*c*) Twenty is what per cent of 200? 8 of 80? etc.

There is an immense number of questions for mental drill in this device.

A DEVICE, NOT A METHOD.

WHETHER what I am going to describe in this article is an original invention, grown on home soil, or not, I do not venture to decide; but I suspect it to be. At any rate, — honor to whom honor is due, — the Hamilton schools are the first in which the invention was put into operation. Here is an illustration of the device which will aid the explanation. It is called

NUMERATION BOARD.

The board is used in the first and second years of school. It consists of a board half an inch thick, about a foot wide, and five feet long. Grooves divide the surface of the board into four parts. The part on the right contains ten small holes, each just large enough to put a lead-pencil in. The second compart-

ment has ten holes, each of which is large enough to hold a bundle of ten pencils. The next compartment has ten holes, each of which is large enough to contain ten bundles of ten, or one hundred each. The fourth compartment, the last one on the left, contains only one hole, but large enough to contain ten bundles of one hundred each, or one thousand. This illustrates, better than any thing yet found, the process of numeration, and we use it thus: —

The board, being large enough, is placed before the class, where it is easily seen by all the pupils; and the teacher has a sufficient number of broom-corn stalks, of the thickness of a pencil, about six inches long. She calls upon a pupil to fill the ten small holes on the right. When that is done, she requires these ten to be taken out, bundled together, and fastened by a little rubber band. Then the bundle is placed in the first hole of the second compartment. This making of ten is continued until all the holes of the tens compartment are filled. In order to break the monotony, such exercises as: Two tens are equal to twenty, or are called twenty; four tens, forty; nine tens, ninety; how many tens in eighty? in fifty? etc., may be wedged in. Then the bundles of tens are treated as the single stalks were treated; namely, made into bundles, with which the holes of the next compartment are filled; and lastly, the hundreds are gathered up to make one large bundle of one thousand.

The progress which the children make in learning to numerate is astonishing. After the figures are learned,

their relative value, by virtue of position, is explained, first, by using naughts to fill the vacant places, and slowly leading on to the fact that the naughts are not necessary to be written, and why not. I confidently believe that it would be carrying owls to Athens and soot to Pittsburgh, to go into a more minute explanation concerning the manner of using this board; for every teacher of the primary grades will see at once the value and utility of this device.

As to the cost of the board, and where to obtain it, I should say, "Do what we did." We applied to a carpenter, gave him the dimensions of the board and the size of the holes, by furnishing him such bundles as would have to fill the holes, telling him to make the holes just large enough to hold the single stalks and the bundles snugly. The board, being of "half-inch stuff," is very cheap. To bore the holes is mere play-work, and many a teacher who is skilful with joiners' tools can make such a board himself. The carpenter makes it for from thirty to fifty cents, according to the kind of wood he uses. It is strong, can easily be put out of the way by shoving it behind the wardrobe, and is light enough to be handled with ease. Instead of broom-corn stalks, little sticks may do, provided, of course, they are of the same thickness and length.

Adding and Subtracting. — The board can also be of great use in illustrating the first steps in addition and subtraction, within the compass of one to one thousand. For instance: —

The first case in subtraction, in which each digit of

the subtrahend is smaller than that of the minuend, explains itself. For instance: 534 minus 213. The second case, where the number of units or tens in the subtrahend is greater than that of the minuend, can be beautifully illustrated by loosening a bundle of the next higher order, and transferring the loosened objects to the next compartment to the right, — in short, untie a bundle of ten to make ten units. If then you have

a minuend like the one in the cut (534), place under it the subtrahend 356. Now, it is evident that 6 cannot be taken from 4, and therefore you take a bundle of ten, which, together with the four loose ones, make fourteen units. From this six can be easily taken. That leaves us two bundles of ten, from which five tens cannot be taken. Again we proceed as before by untying a bundle of the next higher order, and so on *ad infinitum*.

We are not selfish here in Hamilton, and do not propose to patent the device. We offer it for what it is worth to any one who thinks it worth trying. Let him try it, and God bless him for his enterprise and good-will to his pupils.

PRICE-LIST OF COMMODITIES IN THE SCHOOLROOM.

Not long ago I saw a problem on the blackboard, in which the price of a cow was called for. Several attending circumstances in the question made the latter rather involved; and the answer to the problem proved to be, "Price of cow, six cents." That set me to thinking. Thought I, "Is it right to thus corrupt the child's conception of the eternal fitness of things?" I suggested to the teacher, to reserve a space of two feet square on her very spacious blackboard, head it "Price List," and enter upon this space a few quotations of prices of commodities, such as flour, butter, eggs, pork, beef, and the like, and induce the pupils to consult the daily papers, in order to suggest changes occasionally. Thus, for instance, she would find butter quoted between twenty-five and thirty-five cents a pound during the winter, and twelve and a half to fifteen cents in the summer. She would find the price of flour per barrel, to vary between four dollars and a half and six dollars, as supply and demand dictated.

This would be an indirect way of giving most useful information upon subjects intimately connected with the demands of after-life. It would, furthermore, establish a valuable and profitable connection between home and school. It would make teaching rational and practical. It would open the eyes of children to the value of money in general, and that of certain

commodities in particular. It would enable teacher and pupils to make original problems. And all this, without special effort and waste of time. It would, so to speak, link the school and its daily work, with life and its great tasks and demands.

I was a young boy when I heard one of the greatest living teachers pronounce this truth: "Though the ship of school lies at anchor in the harbor, far away from the turmoil and strife of life, it nevertheless will be heaved and rocked by the ripples which are caused by the great waves and billows in the open sea." Let us be practical. The problem in which a barrel of flour is said to cost five dollars can aid the pupil in acquiring arithmetical skill, just as effectually as one in which that barrel of flour is quoted at five cents, or fifteen cents, or seventy-five cents, or sixty-five dollars. Lately, I took occasion to inquire into the effect of the procedure suggested, and I found it to be very beneficial. I found that one problem put on the board served as a model. The numbers were erased, and others were substituted, as the fluctuations of the market dictated. I found this practice in use, as low as the fifth school year, where the pupils had just learned the more intricate tables of denominate numbers. I found that they knew the current prices of various kinds of coffee, of sugar, rice, cheese, flour, and the like. But what pleased me most was the deep interest shown by the pupils in their work; for interest acts upon the learner, like sunshine and moisture upon the vegetable germ in the ground.

PRIMARY ARITHMETIC.

In every branch of study in the curriculum, *knowledge* and *skill* are to be aimed at, particularly in arithmetic. My idea is, that the children in the lower and lowest grades should gain their knowledge in numbers by handling objects. To the young child, six and four mean nothing, but six pencils and four pencils, balls, sticks, books, papers, etc., convey an idea. In other words, *things* should come before their symbols. I have, therefore, advised the frequent use of splints, toothpicks, lamplighters, buttons, etc., which are put into the hands of the pupils for the purpose of making arithmetical combinations and operations with actual objects. I have procured, at a broom-factory, broom-corn stalks, all cut the same size, and bundled them up in packages of ten and a hundred, in order to have some means of illustrating numeration. The teachers of the lower grades — bright, intelligent, enthusiastic young ladies — have taken up the idea, and procured large button-moulds, strung them on wires, and fastened them on the top edge of each pupil's desk. This plan works like a charm.

I am prepared to assert, that, when children who are thus taught are promoted to higher grades, they will not regard arithmetic as a drudgery, but as a delightful occupation. From the concrete idea of number, they are unconsciously led to the abstract idea. And so every branch of study, even the most

abstract history, has a solid stratum of concrete knowledge, gained, or to be gained, by sense perception.

But there is a wide difference between knowing a thing and applying it, between knowledge and skill. Knowledge results from experience, and after it is gained it must be made easily available by constant repetition. A child learns to *comprehend* the multiplication-table by *doing* (handling objects); but the memory must be charged with the table, so that it is ever ready for use. There can be no question that a child may learn the table by dry routine-repetition; but how much more pleasant it is so to learn it, that he knows what he is saying and doing!

All the fundamental processes in arithmetic can be illustrated either by objects, or, when the numbers become too large, by sketches drawn on the board. I must not indulge in enumerating the many ways in which this method may be carried out: space and time forbid.

MISS CELESTE'S PENNIES.

Miss Celeste Morrison, teacher in the Fourth Ward School, Hamilton, showed us one day how she taught arithmetic to little ones. They could make all combinations possible with numbers up to seven; that is, add, subtract, multiply, and divide. They could tell how many twos, threes, there are in six. Now she introduced the number seven. One was added to the six, and the combinations possible within the number seven were then treated. The point

brought out was, that a remainder was obtained more frequently than with any number below seven. The pupils worked with objects, — buttons strung on a wire, broom-corn stalks, marbles, pencils, and other things.

But the brightest feature of the lesson was this: She took a little box, in which she had a number of one-cent pieces, two-cent pieces, nickel three-cent pieces, nickel five-cent pieces; and then followed a series of questions, the answers of which had to be performed, not only told. For instance: How many one-cent pieces will make seven? The child took seven one-cent pieces out of the box, and then said (always speaking in complete sentences), "Seven times one cent are seven cents." Question: "How many twos in seven?" The child picked up three two-cent pieces and a single cent, saying, "There are three twos in seven, and one over." Then three-cent pieces were used with which to *measure* seven. There being no four-cent pieces, two two-cent pieces had to serve in this case. Then a five-cent piece was applied in measuring (dividing) seven.

This is but a little, insignificant device; but to see the children busily engaged in this manner, seeing, doing, and then telling about it, is a pleasure of no mean character. Much attention is bestowed, in the primary grades of our schools, upon speaking in complete, well-rounded sentences; that is, giving answers which embrace the questions. This practice will inevitably terminate in the habit of *correct* speech and *logical* speech.

CHAPTER VII.

LITERATURE AND LANGUAGE.

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THE POET SCHILLER.

Oration delivered at the 125th birthday of Friedrich Schiller.

Ladies and Gentlemen, — I was called upon to deliver the oration of the day in English, and I trust that it is unnecessary to excuse myself for speaking English in America. The founders of this beautiful edifice [Music Hall, in Hamilton, O.,] the members of this association, call themselves "German-Americans," using the word "German" merely as an adjective, and laying stress on the fact of their being Americans: they do not call themselves "American-Germans." This remark, I rest assured, is sufficient to explain the fact that the oration of the day is delivered in the language of the country.

Men who love the good and the beautiful, and help to further it, are worthy of our respect. Men who are enabled by rare talents to accomplish extraordinary things, be this in the domain of art, or science, or industry, and who apply these natural gifts for the benefit of humanity, thereby becoming benefactors of their fellow-beings, — such men have a claim upon our gratitude, and we are morally obliged to show that we

esteem them and value their merits. Men, however, who, elevated and supported by their godlike genius, have, as it were, imprinted upon their people and their era their own signature; have, with the omnipotence of their words, changed the time and entire realm of thought of their nation, and have given to their century a nobler idea of life and its purposes; men who speak from out of their graves with greater eloquence than our contemporaries, — such men are not merely esteemed, they are admired, loved, worshipped. We simply refuse to regard them dead. The birthday anniversary of such a man it is that we celebrate to-day. It is Friedrich Schiller, the favorite poet of sixty-five millions of German-speaking people.

I must, for obvious reasons, refrain from narrating to you the events of Schiller's life. Any history of literature will furnish you the desired data. It is my intention to detain you a few minutes by stating the powerful influence of Schiller upon his own and following generations.

So-called wiseacres, who are in the habit of looking back into the past, lamenting the fact that the good, dear, old times are gone forever, are apt to assert with a whining tone that our generation is wanting in poetic feeling and comprehension. The very fact that eighty years after Schiller's death, his dramas are acted upon this stage, four thousand miles away from his birthplace, and his poems are studied in the schools of America, proves them to be wrong. The same people poutingly turn back to the traditions of classic

antiquity, and find satisfaction in pointing out to us Schiller's frequent references to mythology. They forget that Schiller made use of classic forms merely to symbolically represent modern ideas. Modern progressive thought has constantly to fight with such lovers of the dead past. We ask, What is Hercules to us? Nothing but a symbolic form for strength. What is Apollo to us? Do we see in him the Grecian god? No, nothing but a marvellously perfect and beautiful man. Representations of classic antiquity may be praised for their ideal beauty, and most of them typify thoughts. They have, with us, lost their quality as subjects; they have become attributes. We are not called upon to believe in Grecian or Roman deities. We are supremely indifferent to them.

And is not belief, is not faith, is not conviction, the very essence of every man's life? Shake a person's faith and convictions, and with them falls his whole life's purpose. We have every reason to distrust men who have no convictions, but only interests. The Germans owe it among others to Schiller, that they are a nation with lofty ideals, firm convictions, intense faith, and strong belief.

We modern people believe in man's eternal rights, in freedom of thought and action, in the harmonious development of the race, in the everlasting and unshakable laws of nature, in the moral foundation of state and society, in social equality, and pure justice. Give us, ye sculptors, the defenders of equal rights in bronze and marble. Erect monuments for the heroes who

fought for liberty of thought and action. Paint, ye artists, the statesmen who founded our modern states upon the basis of social equality and impartial justice. Exalt the men who sacrificed themselves in wrestling with Nature till she revealed her secrets. Let us praise and exalt the thinkers who found the *causal nexus* between Nature's marvellous laws and man's varied actions. Sing, ye poets, of the spiritual heroes who gave to posterity ideals of beauty and truth. These are the saints of modern times and the living generation. To these latter-day saints we look up in dark and gloomy times. From them we derive our strength to carry on the war against the spirits of darkness. And when sculptors, painters, poets, and authors glorify our real heroes, Schiller's form will stand among them as one of the greatest of the great.

Looking back upon Schiller and his era, I cannot refrain from mentioning a curious fact, which will tell you more than a lecture of two hours' duration. It is this: —

May I ask: When did Shakspeare's wonderful genius illuminate the English world of intelligence and poetry? It was when the wars between the red and white roses had terminated; when, after the destruction of the Spanish Armada, England had become the ruler of the sea; when, under the gentle but firm sway of Queen Elizabeth, England had reached the summit of greatness and political development, — then it was that this marvellous poetic genius of England bloomed forth, a genius whose greatness it took the

world almost three hundred years to comprehend. Again: When was it that Corneille, Molière, and Racine, Voltaire and Rousseau, charmed the world of thought with their classic productions, with poetry and philosophy? It was when Louis XIV. and Louis XV. reigned over France; when France was at its highest; when the French armies had been victorious on the Continent, and France had reached the pinnacle of glory. Again: When did the classic epoch of Spanish literature occur, or that of Italy? Again the same answer comes: It always followed a period of the greatest national glory.

And now we ask: When did Schiller live? During the second half of the last century, when the political life of Germany was humbled into the dust, partly by foreign powers, partly by the selfish individual interests of over three hundred home-sovereigns; when all national life seemed petrified; when Napoleon I. rode rough-shod over all that was dear to the Germans, and all that had remained of their political independence. Schiller lived and composed during the midnight-hour of German history.

Compare these facts, verified by every — even the smallest — text-book of history, and then listen to these conclusions. While in every other nation, the poets basked in the sunshine of the political greatness and splendor of their nation, and glorified their country's grand deeds, it fell to the lot of Schiller to act as a prophet in Israel: to stir up the people to deeds, to arouse the sleeping energy, to awaken anew the

crushed sense of patriotism, and spur to efforts upon all domains of activity the latent powers of the nation.

This idea must be borne in mind when viewing Schiller, the prophet of the German nation.

Goethe, in his funeral oration at Schiller's tomb, said, "He lived as a man, and as a mature man he departed from us. In that form in which one leaves the earth, he still lives and moves for us in the world of spirits. Achilles is, for us, still present as an ever-striving youth. That Schiller went away early, is for us also a gain. From his tomb there comes to us an impulse, strengthening us as with the breath of his own might, and awakening a most earnest longing to fulfil lovingly, and more and more, the work that he began. So, in all that he willed to do, and in all that he fulfilled, he shall live on forever, for his nation and for mankind."

In this Olympic funeral oration, Goethe happily expressed the characteristic features of Schiller's influence, the very essence of Schiller, as we know him. I mean his everlasting youth, which never loses the strength to beget grand deeds. What other effect can it have, than to infuse into the young generation enthusiasm of the purest kind, when they hear his hero say, —

> "The land is ours, it is our own creation!
> By our own labor, ay, by a thousand claims,
> The land is ours forever! Shall we bear it,
> That this the emissary of a foreign lord

Shall here insult us on our own free soil ?
Is there no help for us ? Must we, then, bear it ?
No ! there's a limit to the tyrant's power.
When men, oppressed, can find no aid on earth
To rid them of their burden, then they rise !
The people rise ; they stretch their hands to heaven,
And thence fetch down their old eternal rights,
There shining in the heavens, unchangeable,
Imperishable as the stars themselves.
Then Nature's own primeval rule returns;
Man stands in battle, ready for the foe.
'Tis our last means; but when others fail,
We draw the sword ! The best of all life's boons
We will defend. In front of this our land,
And of our wives and children, we will stand!"

The poetic creations of very few select authors, possess this never-aging charm. They stand at the entrance of new epochs, and formulate with prophetic eyes the highest aims and purposes for centuries and centuries. These rare minds are the true heroes of mankind, because they are its educators. Such a hero was Schiller. One may assert without presumption, says a German authority, that never since Homer had arisen another poet who was so much of an educator of his people. To him, who had risen with such unexampled energy from the most unruly naturalism to the most ideal artistic form, I say, to him the younger generation in Germany, ever since the appearance of "Wallenstein," has looked up as to a being of higher, nobler kind. Departing, he left as a valuable inheritance "Wilhelm Tell," a drama

which has proven of more than mere literary importance. During the days of doom, when Napoleon's policy was aimed at the annihilation of Germany, and seemed to be destined to be crowned with success; at a time when a patriot like Stein could not find a square foot of German soil to stand on; at a time when a poet of great promise, a man of genius and heart, Heinrich von Kleist, preferred suicide to a life of national misery and unutterable humiliation; at a time when Germans were obliged to fight against Germans like bands of gladiators, and fertilized the soil of all the countries, from the Tajo to the Volga, with their blood, — it was at this time of oppression, misery, and disgrace, that the Germans found consolation in "Tell."

Their patriotic feeling, their energy, their courage, their hatred of tyranny, were kindled, and henceforth asserted themselves. For a person who has eyes to see, Schiller's name is found on every page of that proud history of war, which began at the Katzbach, and terminated at Waterloo. Even to-day, Schiller's words as found in "Tell" are the catch-words in the great drama of life; and wherever great deeds are done by Germans, you will find the secret motives happily expressed in words of Schiller. For, I repeat it, it is the power of youth, which, never dying, never loses the ability to engender deeds.

Great as Schiller was in the dramatic art, he was equally great as a lyric poet. No German poet since Schiller has equalled his magnificent rhythm and rhet-

oric. The language has been made sweeter, clearer, more flexible; it has been forced to reflect the manner of many new minds: yet in the qualities I mentioned, rhythm and rhetoric, Schiller is still the climax of performance. The tenderest strains, the most beautiful harmonious verses, ever composed in German, are Schiller's. A few metric translations may prove this: —

> "The minds of men, in a perpetual strife,
> Revolve from age to age, and find no rest;
> While Nature, in unfading youth and beauty,
> Obeys one everlasting law of duty.
> Upon her constant bosom, ever green,
> Beneath her sky of never-fading blue,
> Lived all the generations who have been,
> And still her children find her fresh and new.
> And the same sun, that o'er some Grecian hill
> Homer beheld, is shining on us still."

And now, after having seen how lovingly his eye rests on mother Nature, listen to this description of the heavens.

"ELYSIUM.

> "Gone is the wail and the torture!
> Elysium's banquets of rapture
> Chase every shadow of woe!
> Elysium seeing
> Endless the bliss and endless the being,
> As musical brooks through the meadows that flow.
> May is eternal,
> Over the vernal landscape of youth:
> The hours bring golden dreams in their races,
> The soul is expanded through infinite spaces,

"The veil is torn from the visage of Truth.
Here, never a morrow
The heart's full rapture can blight;
Even a name is wanting to sorrow,
And pain is only a gentler delight."

Can any thing be more beautiful than this description of the heavens, where "even a name is wanting to sorrow, and pain is only a gentler delight"?

The real value and the immense circumference of Schiller's genius cannot be fully understood until we approach it with mature mind. The man, who, ripe in mind and judgment, returns to Schiller's works, will soon admire and love him. All his lofty words, which sound and re-echo in our ears like sweet remembrances of youth, assume shape and form, and grow in importance. Schiller not only proposed the education of his people to idealism, but he actually began it by his poetic creations. He gave his nation, he gave to humanity, a loftier ideal of beauty, greatness, truth, and justice. When Goethe said with pride, "He was ours," we are justified in saying, "He still is ours."

May our German-American youth study Schiller, and may the sublime ideas of this wonderful poet find their way into their imaginations and their hearts, and there create that longing for purity in thought and action, which alone will lift them to a higher level of existence. It will not make the young generation any less American than it is; for beauty, truth, and virtue are not national, but belong to mankind and the whole world. And old men, covered with the mimic snow

of age, may they again turn to the dusty volumes of Schiller's works, and read of his prophecies and far-reaching truisms, and they will find consolation for the rest of their lives. It is not the dead that speaks to us: it is the immortal spirit of Germany's greatest poet. And as we are here assembled to commemorate the event of his birth, let us resolve to keep his memory alive, and refuse to regard him dead.

A PERTINENT QUESTION.

AN ADDRESS.

WHY is it that native Americans, as well as Englishmen, find it so extremely difficult to acquire another language? I do not mean, learning to handle a few words or phrases, such as, "Je ne le sais pas," "Bon jour," "Ausgespielt," "Wie geht's?" or "Nix kumm 'raus," and the like, but really acquire thorough knowledge of another language, body and soul, idiom and all, and use it conveniently in rapid conversation. Why is it? Some have said, the tendency to "show and glittering results" prevents the American people from employing the necessary hard labor and study which are requisites of linguistic study. But I do not believe this; for in other directions the mixture of the Anglo-Saxon and the Norman races shows a zeal and perseverance that far outshine those of other nations.

Why is it, on the other hand, that the Russians, in fact all Slavic races, of whom we know that they

lack the culture, refinement, and high degree of intelligence, which adorn the Germanic and Romanic races, — why is it that they, of all European nations, learn other idioms most easily, nay, with fabulous ease and accuracy? Why is it, that the Germans, second in rank, have such a prominent linguistic talent?

There have been scores of answers to this question, one even more absurd than the other. I will not repeat them. The answer I wish to give, I believe, comes nearer the truth than most others that I have heard. It was suggested to me by a gentleman who is in the enviable possession of seven languages, all of which he speaks with ease and accuracy. It is this: —

Every one whose mother tongue is difficult to learn and to use, on account of its wealth of forms, that is, of different forms of inflection, and for other reasons, will necessarily acquire a linguistic training in early youth, which will enable him to grasp other idioms without great efforts. Let us briefly consider a few points: pronunciation, syntax, and inflection. Slavic languages have sounds, and combinations of sounds, that make Englishmen and native Americans fairly quiver when hearing them pronounced. If the latter be called upon to repeat a Russian, Bohemian, or Magyaric sentence, he simply calls it an outrage to his smooth and well-polished English tongue. I have particular reference to the consonants of these languages.

We find it natural that people like the Russians find little difficulty in pronouncing the comparatively easy consonants of the English language, — save the slippery *th*, which is too much even for a Russian. On the other hand, the Russians find it difficult to pronounce the English vowels. For English is very rich in vowels. Where other languages have but one *a*, and only varying it in length, — *ah*, and *a*, — the English language has as many as seven, and so on with the remainder. How much influence this fact has upon an American in learning German, you can observe by the pronunciation of a word like "*danke.*" By some mysterious process, it becomes "donkey." As we know of people who are color-blind, I think there must be people who are deaf to certain sounds.

Take the easy English syntax. Why, you may begin a sentence in English, and hardly know how to construct it to give full expression to your thought; you may be sure you will reach the end conveniently, without being obliged to repeat parts of it. This is chiefly due to the most excellent rule: Place the verb as near the subject as you can, — a rule of which almost the opposite is true in German. Here is an example. While in English you say, "Mrs. Hall would be pleased to see Mr. York at her residence to-morrow afternoon, if possible, immediately after services," this would have to be rendered in German construction: "Mrs. Hall would be pleased Mr. York to-morrow afternoon at her residence, if possible, after

services, to see." And this is not a very complex example.

You will easily see, how much more complicated the arrangement of the members of a sentence must be in consequence of this requirement: In case a compound tense is used, the participle or infinitive must come last in the sentence. It necessitates, that the speaker must think the whole sentence over, before he begins it; or that, if he begins it before it is completely developed in his mind, he must bear in mind the detached part of his verb, and utter it when its time comes. In English you may well afford to begin expressing your sentence before you have fully developed it. It is like putting up a frame building: first put up your joists and scantling, then clapboards, siding, sills, etc. First put up subject and predicate, the main element of a sentence, and then attach as many phrases and clauses for ornament's sake as you like.

This makes speaking easy, and this, too, is one reason why England and America have so many world-renowned orators. Now, it has been alleged, that what is said in such a convenient language could not be so profound as that which had to struggle hard to come to light. We find this to be untrue if we consider the well-known fact, that one of the few creative geniuses of the world, perhaps the greatest of all, Shakspeare, spoke no other language than his exquisite, homespun English.

But the convenience the English language affords will unquestionably be the reason of its spreading over

more and more ground, and in some future time becoming *the* language of the globe. For, the very qualities which the philologist of to-day may consider defects, will prove to be advantages over all other languages.

If English could only be freed of its outrageous orthography, almost every thing else in English is easy; and this very fact proves my argument to be correct. For the German, even if he be a thorough scholar, will find English spelling a stumbling-block. The Englishman and native American, on the other hand, will ever find German spelling of trifling difficulty; for the Germans write, with a few insignificant exceptions, what they pronounce. German is very nearly a phonic language.

The most important branch of German grammar, however, is not pronunciation, nor is it orthography, nor even syntax. It is etymology, or, as I will term it here, inflection. This is really the stumbling-block, not only of non-German-speaking students, but even of the Germans themselves. While there are in thousands of nouns in German four distinct cases, expressed by a shading of the word in each particular case, there are no cases at all in English nouns, for the possessive *s* is cunningly separated from the word by an apostrophe. You say, "the man, of the man, to the man, and the man,"—it remains *man*, in whatever case you may use it; while in German it is "*der Mann*, *des Mannes*, *dem Manne*, *den Mann*, *die Männer*, *der Männer*, *den Männern*, *die Männer*."

Furthermore, in German not only nouns are declined, but adjectives, every imaginable kind of pronouns, articles, nay even some numerals. In English all these things are more or less omitted. Did you ever think how difficult it would be, if in English you had to vary the forms of the adjective before the noun? I could easily imagine your disgust if you had to do it. Let us try it. You have to drink *coldes water*, to bathe in *coldem water*, to admire the freshness of *colden waters*, and admit that *coldes water* is the best beverage.

Or, suppose you were obliged, in speaking English, to decline all the pronominal adjectives. You would have to have as many forms of the possessive pronouns as the Germans, namely, thirty-two, where now you have eight. Or, think for a moment of the class which the chapter of gender affords the observing eye; a chapter which is the most unruly you can think of. Thank your stars that you have nothing to compare with it!

Or, please, imagine for a moment, you were to follow up the German conjugation to its fullest extent. Suppose that you would have to say, in conjugating "may," for instance, "I may, I might, I have might, I had might, I shall may, I shall have might." And now the subjunctive: "I maye, I mighte, I may have might, I might have might, I shall maye, I shall have might." This, of course, is all conjecture. Don't you think you have every reason to be thankful for not being obliged to do so? German etymology

alone is enough to frighten the adult student from studying it.

Whether it is preferable to have so many different forms for one word, whether this will promote thinking, I will leave out of consideration here. But it is a fact, that a great deal of talent, skill, study, and exercise is needed to master all these many difficulties. The child whose mother-tongue is so difficult, as I have stated, trains its mental faculties, or rather, its linguistic faculties, by trying to master these difficulties.

I am inclined to think that this struggling with the language is helping the mind in its development wonderfully. But this assistance is denied the English-speaking child. It grows up, stringing its words together like beads, or rather, building its sentences of unhewn stones, which (queer enough) always fit; while the German-speaking child is obliged to hew and fit the blocks before using them.

It is unquestionable, that linguistic talent is not developed where it is not exercised. We need not go to Darwin to hear that a talent, once strongly expressed in a minority of the race, seems to grow, till in the course of several centuries it becomes at last a striking feature of the nation. Nay, in our own families we can remember incidents that bear witness to the truth of this natural law.

In short, whoever has a difficult, finely organized mother-tongue, and has been successful in mastering it (I mean to say this in Italics: *who has been successful in mastering it*), will find, it costs him almost no

effort to learn another idiom, and even two or three; and wherever the mother-tongue flatly denies early linguistic training, there the learning of another idiom is (especially in later years) a task beyond the strength of the one who undertakes to perform it. Do you know of a grown person who learned a second language after his twenty-fifth year of age? He may have learned a little of it, but he certainly did not master it.

It is not my intention to annoy the reader with many conclusions that may be drawn from these statements, — only one. If children of English-speaking parents (I do not say American parents, for that term covers many more) are to study German, let them begin when young.

I might stop here, but it occurred to me, you might probably ask, If the Germans are really so much of a linguistic people, why is it that so many Germans in this country will, for instance, ask you to take a seat *on* the fire; or tell you it is five minutes *behind* twelve o'clock; or assert that one thing is quite "extinct" from another; or pronounce the smooth and beautiful sound *th* as harsh as a *tt* ?

There are two answers to this query: (1) They began too late, after the organs of speech had lost their pliability, after the mind had developed so many other talents, that the linguistic germ had been stifled; after their memory had grown strong in retaining other matters, and had become unfit for retaining linguistic matter. (2) They are not successful in learning Eng-

lish, because they never mastered their own (German) language. I have tried to demonstrate how enormous the number of difficulties is, that are to be surmounted. They come with no other instruction than that which a village or country school can afford them, and besides speak their simple and uninflected dialect, instead of the finely organized High German of the educated classes of society. The German who never mastered his own language fully, of course, must be left out of consideration.

GERMAN IN THE SCHOOLS.

In many places in the West, German is taught in the lower schools. Being called upon to express my opinion on the question why that should be done, I answered as follows: —

I cannot refrain from alluding to an objection which is often raised to the introduction of German in the public schools. It is said, that this is America; that the national language is the English language, and that it should be the language of the whole people; that the duty of the German people is to learn the English language, etc. These assertions are not mentioned here that they may be controverted. No one thinks of denying them. Still we cannot say of the people of America as yet, that it is a homogeneous nation. One of the greatest American writers says, "The American composite character betrays its mixed origin; every thing American is a fusion of distant and antagonistic elements. The language is mixed;

the currents of thought are as cosmopolitic as are the elements of its people."

However, that need not concern us. We grant that the English language should be, if it is not as yet, the national language. But because it is the social and political duty that immigrants should learn this language as soon as possible after their arrival on the shores of America, because it should be taught to the children as the language of their country, seems to be no reason why the attention of our schools should be confined exclusively to it. There is an education, development of mind, and discipline of the intellect, in the study of a foreign language, which we ought to covet for our children, if it can be had by any justifiable means.

"Among the modern languages," says Dr. Rickoff, "there is no other one that can be studied with so great a profit by the English-speaking child. German would be chosen by the philologist as shedding most light on the formation, force, and use of our own, the English. It would be chosen by the scientist as containing the richest treasures accumulated by the study and research of man. Furthermore, it is immediately available in the business intercourse of large masses of people, in the social intercourse of the German people among themselves, and between German parents and their children. Finally, inasmuch as the German people are to be found at the great centres of population in vast numbers, and inasmuch as their number is destined to increase infinitely, and inas-

much as their children will learn the language of their mothers besides the English, we have but to perfect their knowledge of German in the public schools, to keep open a broad and deep channel through which the literature, the science, the art, of a people who know no superiors in any line of intellectual development, mechanical skill, or æsthetic culture, may be turned to account for the benefit of our national prosperity and culture."

Now, we well know that in the crucible it is invariably the precious metal which takes longest to dissolve. We find on the lists of criminals, and other scum of society, a number of German names. If we inquire into these cases, we find, as I did in the police-courts and jails of Cincinnati and Cleveland, that such persons are the children of German parents who gave up their language, regarding it rather as an obstacle, and neglecting to teach it to their children. They have proven base metal in the composition. These parents, who could barely make themselves understood in English, threw away a priceless treasure, were ridiculed by their worthless children for the poor English they spoke, hence lost hold upon their children's budding characters, and soon found their control gone. And, on the other hand, look upon the astonishing prosperity of German families in which the German language is kept alive like a holy fire; see what well-behaved children they raise, and notice the unmistakable influence of the mother-tongue as an educational factor. If for no other reason, German should be temporarily

kept up for that alone. The English language does not suffer under it. The children breathe it with the air; moreover, the study of the German assists the children in acquiring a thorough knowledge of the English.

Of course there will be a time when German immigration ceases, and the present generation vanishes; and then German may be found unnecessary as a medium of culture and education. There can be no doubt, that, in the "battle for existence" between the two languages, English will survive as the "fittest," being the easier of the two.

But, however strong or weak other arguments may be in favor of German in the public schools, there is one which should put the question definitely at rest. It is, that, by the introduction of German into the public schools, the children of German parentage are drawn into them, and they learn to speak the English language correctly and purely; and, growing up with the children of English-speaking parentage, they become one with them in patriotic devotion to American institutions. This is an argument which I wish to emphasize particularly. Private schools of all descriptions, in which the English language, and American history, and patriotism naturally take back seats, would flourish if we had not wisely drawn the German school population into our public schools, — "the crucible within which all nationalities are fused into one homogeneous nationality, — the American." German in the public schools does not tend so much to Germanize America as it does to Americanize the Germans.

Having clearly stated what the *object* is, it is an easy matter to answer the query, to what extent the German language should be taught. There should be no sham of any kind in the schools. Whatever is done in school should be done well or not at all. We should teach German as thoroughly and completely as any other branch of study. But our schools are, and needs must be, "elementary schools." The very name of our schools gives an indication of what is done in them. We do not try to make our pupils *master* any branch of study; that would be a presumption: but we intend to thoroughly acquaint them with the elements and rudiments, and to train them in the ready application of these elements.

One more point, and then I will close. Figures show that the pupils studying German are not only not retarded in their English studies, but that a larger proportion pass the examination for promotion than of those who study English only. These statistics were compiled by non-German gentlemen, supervisors and superintendents of schools in Ohio and other Western States, and will be furnished if desired. The subject of "German in the public schools" has an interesting feature if viewed from a business standpoint. If German were abandoned to-day below the high school, we should not save a dollar to the community, because our so-called German-English teachers are not supernumerarii, but regular class-teachers, who devote, at an average, no more than one-third of their time to German in each class. The remaining two-

thirds are given to the English studies. Now, if German below the high school costs nothing in money, and only about forty-five to sixty or ninety minutes a day in time, there seems to be no reason for objection whatever.

THE VALUE OF GRAMMAR.

It is perhaps well to worry our pupils as little with grammar as possible, and, instead, give them more instruction in language. It is my idea, and I am happy to say not mine alone, that a child should first learn to think *in* a language, before it is obliged to think *about* the language, that is, about its construction. But dispensing with grammar altogether is pouring out the child together with the bath. For *grammar is the logic of the elementary school;* that is to say, what logic is to the higher and highest schools, that grammar is to our elementary schools. It offers opportunity for defining, classifying, and distinguishing, which will train the child in correct thought. To make a correct statement, is by no means so easy a thing to the average man or woman as seems desirable; and a little grammar will assist in learning to do that. But I mean a little, a very little grammar, will suffice. Grammarians are apt to enhance the importance of this branch of study by claiming that the leading object of the study of English grammar is to teach the correct use of the English language. This is wrong. Prof. Whitney of Yale College, the greatest linguist of America to-day, pronounces it "an

error, one which is gradually becoming removed, giving way to the sounder opinion that grammar is the reflective study of language, for a variety of purposes, of which correctness in writing is only one and a secondary, or subordinate one, by no means unimportant, but best attained when sought indirectly. One must be a somewhat reflective user of language, to amend even here and there a point by grammatical reasons; and no one ever changed from a bad speaker to a good one by applying the rules of grammar to what he said." And Herbert Spencer remarks, "There can be little question that good composition is far less dependent upon its laws than upon practice."

POLYGLOT ENGLISH.

THE polyglot nature of the English language makes it very difficult for the pupils of this country to learn the language as it ought to be understood after eight or twelve years of study. The want of consistency in the language is perfectly appalling; and many, many words, polysyllabic in the bargain, stand like great, erratic blocks, literally without organic foundation such as a root. It is well known to the psychologist, that new cognitions are readily learned and willingly retained if linked to previous cognitions. How a child is to link the word *conflagration* with *fire*, however, is very difficult to conceive; while in German it is *Feuer* and *Feuersbrunst*. *Prohibition*, *hypocritical*, *convalescence*, *magnanimity*, *metaphysical*, *incomprehensibility*, and scores of other words, offer the same difficulty.

Some words like *intimidation* are more easily learned and understood. This word "intimidation" is traced back to *intimidate*, first, and that again is traced back to *timid*. There the child has a root to go to, a fountain-head, so to speak. But how few are the words of Latin, Greek, and French origin, that can thus be traced back! How many, many applications are necessary before the child can comprehend the word *humanity* or *humanitarianism!* If the word had consistently grown out from the Anglo-Saxon words *man* and *friend*, and had been built up somewhat in this shape, "men-friendliness" (the very translation of humanity), even very young children could understand it instantly. This jumping from one compartment of the language to another retards the progress the child makes, or ought to make; because the compartments are connected by no apertures, except such through which learned linguists can creep, who will trace back Latin, French, German, and English, to Sanscrit and more ancient Aryan languages.

The child learns the word *dog*, and has a very clear idea as to its meaning. However, if it is to express any thing as dog-like, or pertaining to dogs, it must reach into the Latin compartment of the English language, and there find *canine*. And so I could go on *ad infinitum*, all through Webster or Worcester, much to the disgust and enlightenment of teachers; but I should be obliged to write a book on language alone, and I have done that too often not to know the penalty connected therewith.

"A little Latin, however, is a fine thing;" and a little can be learned by anybody, young or old, sufficient to make him understand the English language better. Thus, for instance, I should suggest to teach the meaning of Latin prefixes, such as *ab*, *ad*, *con*, *de*, *dis*, *ex*, *in*, *inter*, *pre*, *pro*, *re*, *sub*, *trans*. They may be treated as is done in our schools and in Cincinnati. The following examples are taken from a pamphlet prepared by the teachers of the intermediate schools of Cincinnati four years ago.

Ab.

Signifies *from* or *away*.
*Ab*duct, to lead *from*. *Ab*stain, to keep *from*.
*Ab*stract,[1] to draw *from*. *A*vert, to turn *from*.
*Ab*ject, *ab*solve, *ab*sorb.

Ad.

Signifies *to*.
*Ad*here, to stick *to*. *A*scribe, to write or impute *to*.
*Ad*duce, to lead *to* or bring forward. *At*tract, to draw *to*.
*Ad*join, *al*lude, *an*nounce, *ac*cord, *ac*cede.

Con.

Signifies *together* or *with*.
*Con*cede, to agree *with*; to yield. *Con*tract, to draw *together*.
*Con*cur, to run *together*. *Con*nect, to lie *together*.
*Con*cord, *con*fer, *com*pel, *col*lusion.

De.

Signifies *down* or *from*.
*De*duce, to lead or draw *from*. *De*scribe, to write *down*.
*De*tract, to draw *from*. *De*tain, to hold *from*.
*De*jected, *de*fer, *de*lude, *de*nounce, *de*capitate, *de*cry.

[1] *Abs.*—The form of a prefix is often changed so that its final sound may unite easily with the root. Thus *ab* becomes *abs* in *abs*tract and *abs*tain; *a* in *a*vert. *Ad* becomes *a* in *a*scribe; *at* in *at*tract; *al* in *al*lure; *an* in *an*nounce; and *ac* in *ac*cord.

Dis.

Signifies *to take away, from, off,* or *out; not; asunder.*

*Dis*honest, *not* honest. *Dis*cover, to *take* the cover *off.*

*Dis*arm, to *take away* arms. *Dis*tract, to draw *asunder.*

*Dis*cord, *dis*pel, *dis*courage, *dis*loyal.

Ex.

Signifies *out, out of.*

*Ex*pel, to drive *out.* *E*duce, to lead *out.*

*Ex*tract, to draw *out.* *E*ject, to throw *out.*

*Ex*ceed, *ex*cess, *e*lude, *e*nunciate, *e*ducate, *ex*port, *ex*cursion.

In.

Signifies *in* or *into; on* or *upon; not.*

*In*cursion, a running *in.* *In*duce, to lead *into.*

*In*scribe, to write *upon.* *In*ject, to throw *into.*

*In*active, *in*sane, *ig*nominious, *im*moral, *ir*regular, *il*legal, *im*port.

Inter.

Signifies *between* or *among.*

*Inter*cede, to go *between.* *Inter*jection, a word thrown *between.*

*Inter*lude, a play *between.* *Inter*pose, to place *between.*

*Inter*mix, *inter*sect, *inter*vene, *inter*view.

Pre.

Signifies *before.*

*Pre*cede, to go *before.* *Pre*cursor, one who runs *before;* a forerunner.

*Pre*dict, to tell *before,* to foretell. *Pre*lude, a play *before.*

*Pre*fer, *pre*fix, *pre*vent.

Pro.

Signifies *for, forward, forth,* or *out.*

*Pro*ceed, to go *for*ward. *Pro*duce, to lead *forth.*

*Pro*pel, to drive *forward.* *Pro*noun, *for* a noun.

*Pro*scribe, *pro*ject, *pro*voke, *pro*tract, *pro*long.

Re.

Signifies *back* or *again; anew.*

*Re*cede, to go *back*. *Re*member, to bring *back* to mind.

*Re*pel, to drive *back*. *Re*ject, to throw *back*.

*Re*duce, *re*fer, *re*form, *re*pulse, *re*conquer, *re*take, *re*make.

Sub.

Signifies *under*, *up*.

*Sub*scribe, to write *under*. *Sup*port, to *up*hold.

*Sus*tain, to bear *up*. *Suf*fer, to *under*go; to allow.

*Sus*pend, *sub*tract, *suc*ceed.

Trans.

Signifies *across; over; through.*

*Trans*fer, to carry *over* from one person or place to another.

*Trans*port, to carry *over* from one place to another.

*Trans*cribe, to write *over;* to copy. *Trans*mit, to send *over*.

*Trans*form, *trans*late, *trans*gress.

MISUSED WORDS.

The following examples are frequently touched up in the schools of Cincinnati. The teachers of the intermediate grade found it desirable to print a little pamphlet, a few years ago, which proved of great assistance to many teachers. I quote from it: —

Invent. To contrive something not in use before.

Discover. To reveal that which existed before, but was unknown. Bell "invented" the telephone; Columbus "discovered" America. Discover, to *un*cover.

Teach. To *give* instruction.

Learn. To *receive* by instruction; to become experienced.

Educate. To lead out and train the faculties of the mind.

Instruct. To furnish the mind with knowledge.

Love. To have affection for. We "love" a mother, a father, etc.

Like. To be pleased with. We "like" a picture, good music, etc.

Respectfully. In a polite manner and with esteem.

Respectively. Applying individually to a group or a series. Example. — I would "respectfully" ask, etc. Yours "respectfully." Animals associate "respectively" each with its kind. The Northern and the Southern trains leave at 8 A. M. and 8 P. M. "respectively."

Emigrant. One who *leaves* a country to settle in another.

Immigrant. One who *enters* a country to settle.[1]

Character. The "character" of a man is what he really is.

Reputation. The "reputation" of a man is what people say of him. A man whose character is not good may, nevertheless, have a fair reputation.

Balance. That which is *added* to make an equality.

Remainder. That which is *left* after the removal of a part. Example. — The "balance" of an account. The "balance" of power. The "remainder" of the company; the "remainder" of the week.

Expect. Is often used incorrectly in sentences that refer to the past or the present: as, I "expect" he returned to New York; I "expect" John is sick. Use in such sentences, *think*, *believe*, or *suppose*. "Expect" is to look out for, and, hence, always refers to the future; as, I "expect" good news within a week.

Artist. One skilled in any of the fine arts.

Artisan. One who has some mechanical employment.

Common. Belonging alike to more than one.

Mutual. Proceeding alike from each of the two parties concerned. Example. — He is our "common" friend. The two friends gave a "mutual" pledge.

[1] Abbreviation and corruption of "Ex-migrant" and "In-migrant."

A PRACTICAL COMPOSITION LESSON.

THERE are teachers who think every thing must be taught by rote and rule. They are apt to forget the great educational force of habit and example. One day I attached to one of my examination questions, something like this: "Give the answer in the form of a letter." The teacher protested, saying the pupils had not been taught to write letters yet; it was unjust to ask this. "And when will they be taught letter-writing?" I inquired. *Answer.* — "Why, letter-writing is one of the special features of the language course in the C intermediate grade." — "Then I must understand that you interpret the course to say that below that grade no letter-writing is to be done, and that you attribute to the author of that course so much short-sightedness as to think that only the pupils who reach the sixth year of school should at all be taught to write letters? What will the great number of pupils do who leave the school before they reach the C intermediate? Will not they swell the great mass of ignorance; or, as they are properly called, the great army of the unwashed? Remember that we have frequently occasion to deplore, in order not to use the term 'ridicule,' the execrable notes sent us by many parents of our pupils; faulty in form, in spelling, in expression, in logic, in all and every thing; and would you then doubt the necessity of early training in letter-writing?"

Of course the teacher was sensible enough to admit

the necessity. And now we devised a plan of making the exercise of letter-writing as little laborious as could be done. We agreed to do this: To put a letter on the board, and leave it there for several days, perfect in form as regards date, heading, paragraphing, and signature. This was to be copied by the pupils frequently, on slate or paper. After a few days, one or more particulars of the letter should be changed so that the truth impressed itself upon the child's mind, that, whatever the contents of the letter might be, its form remained the same.

More than one-half of what the child gains in school is gained by habit and example. If such a standard form as suggested were exhibited, our children would not enter the high school unable to write a simple note or letter. To be able to write letters, is one of the requisites of a business man; in fine, no man or woman, however humble his or her station in life, should be left unacquainted with business forms. The example set by this one teacher has had good results. It was soon followed by other teachers; and at present letter-writing is practised at intervals in all the grades of our schools above the lowest primary grades. It is another illustration of the ancient saying, "*Non scholae set vitae discendum est.*"

SPELLING TAUGHT RATIONALLY.

Oral spelling in chorus, or by individual pupils, seems to me sheer waste of time. We do not learn to write orthographically by oral spelling. The way

to learn to spell (write correctly), is not to spell (to separate the letters orally). Spelling is an old Anglo-Saxon word, and means *splitting*. In some parts of Germany, the ancient homestead of the Angles and Saxons, the people still "*spell holz*" (split wood). The "Practical Teacher" is right in saying, "Oral spelling is not spelling: it is the oral description of a written word; it helps spelling as oral descriptions help drawing and making. Most oral spelling is a terrible waste of time."

What, then, is to be put in place of oral "word-splitting"? I maintain that words, like human beings, have physiognomies. A person whom we pass on the street, merely glancing at him, will scarcely be remembered by us, though he may be described to us by others who know him intimately. However minute this oral description may be, in the absence of the person we are unable to form a vivid picture of his face and form in our memory; in other words, we can not *recall* him.

On the other hand, if we have met that same person frequently, if we have looked at his features attentively, if we have noticed him smile, speak with animation, — in short, if we have had occasion to study the face, either intentionally or without intent, — it is not likely to escape our memory again. The person can easily be called up in our memory; and if we were skilful artists, we might produce a likeness on paper on short notice. Now let us suppose the person possessed a peculiar feature, such as a big scar on his

cheek, or a wart on his nose, or a very low forehead, or a receding chin, or pretty dimples, or what not, it will not be necessary to see him often; this very peculiarity that struck our attention will indelibly imprint a likeness of the face upon our memory.

Now, it is exactly so with learning orthography. Each word has a physiognomy. Some words have plain faces, some have features peculiar to themselves; but all are learned, not by describing them orally, but by using our *sense of sight.* Words of as many letters as they have sounds may be learned by seeing and pronouncing them. If the teacher dictates such words as *paper*, *lamp*, *pencil*, etc., and carefully pronounces every sound, they will be written correctly. But the number of such words is comparatively small in English. Other words in which the number is greater than that of their sounds, as *book*, *street*, *slate*, *ring*, etc., will have to be observed more closely and oftener by the young learner. In order to make the peculiarity of these words come out, and strike the attention, it is well to mark them thus: b*oo*k, str*ee*t, slat*e*, etc. This should be done on the board. Such words as, sep*a*rate, *eu*logy, forf*ei*ture, str*y*chnine, gay*e*ty, eti*qu*ette (I take a few out of the multitude hap-hazard), are often misspelled. If marked on the board as indicated, and left there a few days, it may be safely said that their peculiarities will be remembered or recalled.

The secret of *vivid knowing* is *vivid seeing.* If every spelling lesson is conducted according to the principle

that we learn orthography more through sight than through the sense of hearing, I am sure we shall find little difficulty in obtaining good results. In higher grades, words may be grouped according to rules, but no rule should be given: it should invariably be discovered by the pupil. If the teacher put the following words on the board in a column: "pavement, amusement, chastisement, achievement, infringement," etc., and opposite to these, in another column, such as "judgment, abridgment," and others, it will not be long till the pupils have discovered why the final *e* of "judge," for instance, in the second column, is dropped. This is mixing in a little brains in the otherwise dry study.

At every stage of the course, however, this paradox remains true: "The more crayon a teacher consumes, the better his instruction."

A SUGGESTION IN SPELLING.

Teachers who do not believe that oral spelling ("spelling down," spelling matches, and daily dictation of a number of incongruous words from the spelling-book) did ever or will ever produce correct writers, that is, orthographers, and who have the courage of their conviction to say so, are often looked upon as miniature Bob Ingersolls. They are regarded as despoilers, who tear down without building up again. They are classed with the nihilists who believe in Nirwana. Many a small soul trembles as his old-fashioned beloved spelling is attacked. In his

anguish he peevishly cries out, "*Noli turbara circulos meos*," without being any thing like Archimedes in depth of thought, in extent of vision, in sincerity of purpose, or fertility of ingenuity.

A list of words without meaning to the child, isolated words without connection in thought-bearing sentences, are like pebbles in the stomach. You may sugar-coat pebbles till they are almost too thick to swallow, but that does not make them digestible. They will merely weaken the system. Do not say, fair readers, "Here is another specimen of a live nihilist," for I mean to suggest something in place of the spelling lesson of "ye olden time." Hitherto we were in the habit of dictating words from the spelling-book which the pupils had been told "to study." I need not explain how utterly futile this studying of often incomprehensible, always incongruous, and therefore indigestible words, is. The pupils may succeed, for the time being, to spell, that is, to split them; but they cannot correctly build them up again, write, and properly apply them.

It may be and it is argued, "Our fathers learned to write correctly by being thus taught: why should not we?" In the first place, they did not learn to write correctly *because* they spelled orally, but *despite* their spelling orally all through the speller from back to back. All who did learn to write correctly did so because they read much, and noticed the physiognomy of the words; and, when writing, used dictionaries and other books of reference. In the second place,

if only that is right and worthy of imitation which our fathers and forefathers did, then we deny the justice of progress of any kind. So, then, let the forefathers rest peacefully in their graves, and remember the poet's word: "*Nur das Lebende hat Recht.*"

There is something so ridiculous in the old-fashioned spelling exercises, that I cannot refrain from applying a homely simile which will throw light upon the procedure, and reveal its true inwardness. A simple-minded fellow enters the studio of a portrait-painter, and says, "Sir, I want you to paint my grandmother." — "With pleasure," replies the artist. "Bring her here; we must have several sittings to complete the picture." — "Well, but she's been dead these eighteen years; if she were alive I shouldn't need her picture." Is it necessary to state that teachers often require words to be written with which the pupils are not familiar? Is that any thing else than asking the artist to paint a dead grandmother? But it is said some artists are able to paint a face they have seen but once. True; and so certain children remember the physiognomy of words, and reproduce them after one glance. But exceptions are not the rule. Words (as well as faces) are better remembered if they are learned in proper surroundings. When we are brought face to face to a person who claims to have been introduced to us before, we ask, "*Where* was it I saw you?"

Now, my suggestion is this: A reading lesson in the primary grades contains a certain number of new

words, with which it is the intention to familiarize the pupils. After the lesson is read, the teacher may single out the sentences in which these words occur, and have these sentences *copied* verbatim. If the words are strewed all over the reading lesson, so that copying the whole lesson would consume too much time, the teacher may embrace the new words in a few short, neat sentences, write them on the board, and have them copied from there. Now she may call upon the class to underscore the new words on the slates, as she does on the board. When that is done, she may ask the pupils to moisten the tip of the forefinger, and erase the first word underscored, leaving the remainder of the text intact. It is done. She now asks, "What word did we erase?" "How was it spelled?" "Insert the word again." This is done with every new word of the lesson. Sometimes it is found desirable to treat a word thus repeatedly. This is *teaching* orthography in the primary grades; it is not the thoughtless testing in vogue nearly everywhere in this country, a procedure which seems to aim at a plentiful crop of mistakes.

One of my teachers to whom I had recommended this manner of practising orthography said, "Well, but they get a hundred per cent every day." She meant to say, "Well, but now the pupils do not make mistakes any more." God be thanked, they don't: that is exactly what we should aim at. Suppose that we were to grade the pupils daily in cleanliness: would we drag them through the gutter first, and

then wonder why they are not clean? One ounce of prevention is better than a pound of cure. Let the pupils only write correct physiognomies of words, and their memory will not retain any wrong ones. Do not permit any mistake to be made. Go through the aisles, while the pupils are at work, and correct, that is to say, "make right" what is found wrong. By thus vigilantly weeding out error, you will develop in the pupils an orthographical conscience, so sensitive that it will revolt against error as a moral conscience will against crime.

Of course this advice is offered to primary teachers; in higher grades, other modes of teaching orthography may prove more successful.

GARMENT AND SUBSTANCE OF THOUGHT.

WHY is it, that the eight years' course of an American common school yields far less fruit than a course of six or seven years in a German *Volksschule?* Why is it, that pupils in the Cincinnati, Cleveland, Columbus, and Hamilton schools, who have daily lessons in German beside their other English studies, are no whit behind their schoolmates who aim at a common English education only? It is no enigma to any one who comprehends the peculiar difficulties the English language affords. Reading and spelling English are very difficult to learn. After the first year, there are literally no more difficulties in the mechanical part of reading for a child in Germany. But think of the enormous amount of time and energy

the English and American child has to expend in trying to master the mere *garment of the thoughts of others*. He finds little time and energy left for the *substance of thought*. The German language offers no obstacles in orthography, such as are found in English. The latter is full of pitfalls. Look at any of the numerous courses of study, for primary and intermediate grades. There we find reading, spelling, writing, grammar, and composition; all these have reference to the garment and the forms of thought. Then we find geography, arithmetic, and a small pellet of home history; these, in a measure, offer substance of, or material for, thought. When any one suggests that natural history, physics, physiology, and general history be inserted in the curriculum (all of which, by the way, are taught in the intermediate grades of German schools, only to a limited extent, of course), wise-acres raise the cry of over-pressure, and justly so perhaps. Are our children and children's children forever condemned to suffer from the iniquities of English orthography? Must they lose or waste precious years in early youth, in learning to wield the unruly instrument of English spelling? Think of the time and energy which might be saved if we *wrote as we pronounced*, no more and no less. The recording angel must shed a silent tear of unspeakable misery, when he is obliged to record in English; but then it is reasonable to presume that he, at least, writes phonetically, — a presumption which needs no Andover theology to uphold it.

MISS LOTTIE'S THREE BOYS.

Miss Lottie Phillips, teacher in the Fifth Ward School, Hamilton, the other day gave a model lesson in reading, before the teachers of Hamilton, and astonished them all by her skill in applying sounding, instead of spelling, in teaching to read. First, she proved that the pupils had been taught the required number of complete words by the word-method; then she practised analysis of such words as *rat*, *man*, and the like. This analysis was illustrated by placing three of the brightest little chaps in front of the class, charging one to say *m* (the sound *m*, not the letter *em*) when called upon; the next one, *a;* and the third, *n*. Then by placing them close to each other, so that their shoulders would touch, she made them sound the word *man* rapidly. The same was done with other words.

Now she separated the boys, the middle one remaining in his place, while the others receded toward the right and left; and every time they made a step, the word was pronounced over again, thus separating the sounds farther and farther. After that was done, synthesis followed, and the two "end men" came back to their old position step by step, the three boys pronouncing the sounds as often as a step was made, the sounds being drawn long enough to make them appear one word.

Then other words were treated in like manner. Now the teacher changed the boys' positions, and

asked each to pronounce his sound. Of course, it was at once seen that that did not make the word *man*, or whatever word was before the class. Finally they assumed their former position, and once more the well-known words were pronounced. Then these words were found on the chart, on the board, in print and script form; and it was quite obvious that the class enjoyed the lesson hugely.

Call this play, if you please. If the children learn more by play than by joyless drudgery, I prefer play every time. I assure my readers it was visible to the naked eye, that there was every condition of successful teaching exhibited by teacher and pupil.

IN BLACK ON WHITE.

It is well known what an excellent schoolmaster James A. Garfield was. He possessed a skill in leading the students *ad absurdum*, rarely surpassed by any living teacher. When he was president of Hiram College, something was remarked about the slovenliness, carelessness, and general want of exactitude, of the students in copying or quoting authorities. He desired to test this, and his genius hit upon a most admirable way of doing it. He copied a passage from Virgil on a slip of paper; cut fifty more slips of the same size, and then handed one of the students his copy, and asked him to copy that for him quickly, to oblige him, because he had not time to do it himself. The student went to work, copied it hastily, and Garfield numbered this copy 1 in the corner. Then

he gave this copy, No. 1, to a second student, and asked him also to copy it. He did this so unostentatiously that student No. 1 was not aware of it. The second copy was given into the hands of the third, the third into the hands of the fourth, the fourth copy into the hands of the fifth, until finally the forty-ninth copy was put into the hands of the fiftieth student. The last ten or more boys had a broad smile on their faces while they copied the passage. The reason of this was well known to Garfield. When at last the fiftieth copy was handed to him (it may have taken a number of days, so as to accomplish this copying without revealing the intention), it looked more like Russian or Hebrew than Latin. It was literally incomprehensible. Every one of the copyists had made new mistakes, until finally the last copy proved incontestably, to both students and faculty, the justness of the remark about the boys' shiftlessness and inaccuracy. This occurrence was an eye-opener for the whole college.

Shall we add a moral? Yes, fair reader, it is this: Try it yourself with plain English, and convince your own boys and girls to what inaccuracy leads.

CHAPTER VIII.

GEOGRAPHY.

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A NEW DEPARTURE IN TEACHING GEOGRAPHY.

[*A Paper read before the National Educational Association.*]

PERMIT me to depart from the customary method of procedure, by starting from the general, and going down to the particular subject, by first directing attention to the fact that in teaching young pupils we should invariably start from sense-perception; from that, the next step to conception and idea is easily taken, — never *vice versa*. Show the child the particular, the concrete thing; show him several similar facts, and offer an opportunity to abstract from them, to rise from the object to the idea. Every subject of instruction in the lower schools has a certain elementary basis of sense-perception. The primary ideas resulting therefrom will be easily understood by the child, because by means of his five senses he can take them in, retain and assimilate them. If any thing be taught lacking this sound basis, — that is, any thing the elements of which cannot be perceived by the senses, — it has no business to be included in the course of study of the elementary schools; it would, in fact,

be like the proverbial bladeless knife that had no handle. In a measure, this rule holds good in every branch of study, even in the most abstract philosophy.

A few simple examples can explain what is meant. (1) You may never see South America, yet you may obtain a tolerably accurate knowledge of the topography of that continent. And it is sense-perception by means of which you gain this knowledge. You know what is signified by such terms as elevations and depressions, peaks and ridges, valleys and heights, plateaus and plains, coasts and banks, capes and inlets, rivers and lakes, bays and harbors, islands and peninsulas, llanos and pampas; they are names of things the like of which have come under your own personal observation. And with the aid of illustrations your imaginative power may be fed sufficiently to obtain a pretty accurate idea of South America. (2) The artist who modelled the Venus of Milo may not have seen the original in reality; but his power of imagination was so great, that, starting from what forms of beauty he had seen, he combined them, and thus created the graceful figure which to this day has remained the ideal of beauty. (3) No one ever saw the ideal, that is, the absolutely perfect human being, of whom we all have a more or less definite idea. His eye must have the keenness of an eagle's eye; his forms must vie in beauty with those of Apollo Belvedere; his strength must be superhuman; he must be accomplished in all the arts, be a Mozart in music, a Raphael in painting, a Demosthenes in elocution, etc.;

he must be a thinker far beyond any philosopher of ancient or modern times; in point of morals he must be as unblemished as the very stars above. Where is he to be found? Yet he exists in our imagination; and he is a creation, every part of which has its origin in reality. (4) Take history. You were not present at the downfall of the Roman republic; yet from what is told you, and from what you have experienced yourself, you can form a vivid picture of the state of things at the time of Cæsar. And your knowledge of the events that happened two thousand years ago in Rome will be the more vivid, the clearer your ideas are of the political institutions of your own country.

Analoy and comparison are impossible when there is nothing in your mind with which to compare. Not having a standard measure, how will you measure a distance? Every iota of instruction, every idea, every rule, must be based upon, or lead back to, perceptions previously gained; and where these are wanting, they must be supplied. This is a condition of rational instruction *sine qua non.*

In the special subject under discussion in this paper, the question arises: Have our pupils the necessary basis of sense-perception when they take up the study of geography, say in the third school-year? I think not; and in the way in which geography is taught commonly, we do not even offer facilities for gaining sense-perception. Do not say, "Ay, but we do; for we start from the schoolroom, and gradually widen the

horizon of observation." Despite this assertion, I repeat: The method in vogue is faulty, inasmuch as it fails to establish, first of all, a sound basis of sense-perception. The average teacher begins to build before he knows upon what foundation he builds. To prove my assertion, I could bring in evidence enough to convince even a jury composed of proverbial court-house rats. A few facts may suffice, however.

Of ninety pupils in a grammar school in Hamburg, only thirty-eight had seen the sun rise; only eight had ever noticed the Milky Way. Out of a thousand children, when entering the public schools of Berlin, only six hundred and thirty-eight had seen the evening red, only four hundred and sixty-two the setting sun. I am prepared to give many more instances of ignorance of common daily occurrences and facts, but my time is limited. Of five hundred and two children that entered the schools of Plauen, Saxony, last year, only ninety-two had seen the sun rise, and a hundred and fourteen had seen the sun set. You may be tempted to say, "These frightful examples of ignorance were found in Germany. God be thanked, they cannot be found in enlightened America." This is but poor consolation. I claim these cases have been systematically enumerated in Germany, because there teaching is a profession, and people there are accustomed to treat educational questions with scientific thoroughness; while in this country, as Hon. Henry Barnard of Connecticut says, "The business of education is pursued with an utter lack of system, with complete,

unsympathizing, independent, self-dependent isolation of effort." I am confident that our American children, if examined, would be found to exhibit the same deplorable want of information. Dr. Stanley Hall has proven this satisfactorily to all who are not prejudiced. My own experience, during twenty years in the schoolrooms of this country, is in substance the same.

The greatest error, then, which prevails in the teaching of geography, is the lack of preliminary steps. In every other branch of study, even the most inferior teacher proceeds somewhat rationally; but geography usually begins, I am sorry to say, with the introduction of the text-book.

Ritter, the father of modern geographical science, says, "The most natural method is the one which makes the child familiar with reality first, which lays a sound foundation of geographical knowledge gained through actual observation of that part of nature which surrounds the child. Here he is to learn to see. Whether he lives in the city or in the hamlet, on the mountain or in the valley, it is certainly not within the four walls, not from maps, and not from the text-book, but in nature alone, that knowledge of nature will be gained by him. Nature ever remains the same; she knows no typographical errors, no blunders in drawing, no want of discretion. Nature's teaching is always perfect. This elementary method combines all the requirements of science: it furnishes the stratum of concrete knowledge, from which abstract ideas are drawn. Amid nature, the child learns to know the

country in all its various conditions, and learns to recognize it even on the flat-surfaced representation, —the map. If this genuine elementary instruction be given, all difficulties of subsequent instruction in geography are removed."

I know I am not saying any thing new. Other people have spoken of the necessity of laying the foundation correctly, but what I desire to do is to show you how this can be done. During the summer, I frequently take my children into parks and out into the country. Let me describe one of these excursions. One morning we started out due east, which direction was fixed by the rising sun. We roamed about till we found the source of a brooklet. Here I began my lesson on watersheds, river-systems, etc. Here the children saw the very beginning of a water-course. They noticed the water trickling from beneath the roots of large trees, till it increased enough in bulk and force to run along in the form of a creek. Here they learned by actual observation what a watershed is, seeing one spring descend on the one side of a ridge, another on the opposite side. We then followed the brook, saw it grow deeper and wider by the influx of other springs. In following it, we sometimes cut across the fields where certain curves in its course would have prolonged the excursion unnecessarily. Every curve, hill, and valley was carefully sketched on a slate as we proceeded. When we reached the end of the brook, we saw where it emptied into the tributary of a larger river. Ascending a hill, we could see

the river meander through the country, could see that it was bridged over in the neighborhood of the city. And on this excursion we noticed hills, rocks, slopes, plateaus, woods, meadows, fields, plains, valleys, paths, high-roads, railroads, farmhouses, and settlements. The observations were all carefully noted down on our slates, and the names were repeated, and thus fixed in the memory. The children learned to distinguish the different kinds of grain, many kinds of trees, certain minerals, birds, and insects; and thus we mingled a little natural history with our geographical lesson. At home we had a review lesson, which proved incontrovertibly that this kind of instruction is the most successful of all.

We may call this an ideal lesson in geography. Circumstances, as they prevail in our schools, make it next to impossible to follow this example. All things considered, however, I dare say, if a teacher of a Third Reader grade would take her pupils out of town, and take a position on the top of a hill if there is any within reach, and then and there point out the different things to be seen, I am sure the children would learn more real geography in one half-hour than they could in a year from the printed page. Some cities are favorably situated for such instructive excursions; and if the school authorities were asked for permission, I believe they would not refuse it.

If, however, this ideal instruction in geography be considered impracticable, we might substitute something in place of nature, something imitative of

nature, by which to form that primary basis of sense-perception, without which instruction in geography will never have lasting results; something better than the flat-surfaced representation, the map. We can make the hills and the valleys, the capes and the ridges, the plains and plateaus, the water-courses and water-sheds, by procuring a large baker's pan of galvanized sheet-iron; and with clay, sand, gravel, a few sticks and twigs, and water, we can mould mountains, hills, and show lakes, rivers, etc., and thus create a fancy representation which offers, in a measure, what nature itself offers. In this way, too, we can lay out a city or village, a whole state or continent, in the rough. In short, by way of imitation, we can establish all the primary ideas desirable for a thorough comprehension of the subsequent instruction in geography. We must dismiss from our mind the erroneous idea that we may take for granted the existence of certain elementary ideas in our pupils. Rather presume too little than too much. Again I state that I am saying nothing new. I only intend to lead up to a point which will be new.

A large pan, such as I have described, ought to be furnished by the school authorities, to every Second and Third Reader grade. Then, when the preliminary steps to the study of geography have been taken, we may introduce such relief maps as are now patented in this country. They show elevations and depressions and water-courses in superficial projection. They are made of papier-maché, and are covered with

slating or other cleansible substances, adapted to receive obliterative marks made with slate or lead pencil or crayon, and may be used as slates. These maps serve to bridge over the chasm between nature and the flat-surfaced representation, — the ordinary map.

Let me submit to your earnest consideration these questions: Has not geographical knowledge, for ages, been wrested from overstocked maps? Had not the child to search painfully among a bewildering mass of data and facts, for those that were to be committed to memory? Was not a systematic progress, step by step, impossible? Now, just as little as a teacher would give into the hands of a child a copy of Webster's Unabridged when he is to begin the study of reading, just as little can it be rational, in geography, to place before the child such a map. We must grade the matter of instruction in geography, just as we grade the matter in reading, in arithmetic, and other branches. Relief maps of this kind would facilitate this grading, as well as present opportunities for the gradual upbuilding of a geographical knowledge, as gained item by item by the child.

They can be made as cheap as common maps, and will therefore meet the formidable objection of cost, raised against relief maps heretofore. Upon these maps may be entered, as upon a slate, the data to be learned. And thus the child is made self-active: it learns by doing. When the lesson is completed, the marks and names entered upon it are carefully

erased with moist sponge, and we are ready for a new or for a review lesson.

And now we ascend to the higher grades, the Fourth or Fifth Reader classes. Thus far, I understand, few teachers, if any, use a text-book in teaching geography. From this grade upward, the text-book is used everywhere. I am not in sympathy with this. I cannot recommend any text-book that contains more than maps and illustrations. It should contain no text; should, in fact, be no text-book, but an atlas pure and simple. Why? I shall state farther on. And as to the wall-maps, I have my serious doubts as to their usefulness in their present condition. A wall-map to be used in the Fourth or Fifth Reader grade should have recorded upon it nothing but what belongs by right to a picture or representation of nature; and therefore it should contain no lettering, no names. Permit me to present to your consideration a map which I made for my own children. I procured a portable blackboard, drew the map by means of the pentagraph, and colored the water-courses pale blue. In order to make it less destructible, I gave it a waterproof, cleansible surface. Let me show you how the map may be used. It contains, as you will notice, only the outlines of the continent, exhibiting *terra firma* in black; oceans, lakes, and water-courses in blue; and no name whatever.

The teacher, pointer and colored crayon in hand, pointing to the sources of two rivers that run in almost opposite directions, draws out by a few leading

questions, that here must be a water-shed. Children who have been taught as I indicated at the beginning of my discourse are able to thus reason from effect back to cause. Knowing that water seeks its level, they will, with great decision and accuracy, fix upon the map all important water-sheds of the country. These are marked with crayon by the teacher himself, or by pupils under his direction. By degrees, the map is stocked with all the elevations to be learned. This takes very little time, and has the great advantage of concentrating the pupils' attention. Every name thus learned, both of mountains and rivers, is written on the board: the name of the main river in the middle; below it, on the left, its left tributaries; on the right, its right tributaries. These names are left on the board a few days. They are spelled and copied. The names of elevations thus learned are grouped and treated likewise. The coast-line, islands, capes, inlets, peninsulas, etc., are pointed out, marked with crayon, and named. Thus crayon and pointer are ever kept busy in bringing out new points. The coast line and general configuration of the continent may be taken for one lesson, the rivers for another, and so on. After the lesson is over, all marks are erased; and now the pupils are called upon to mark points themselves and thus learn by doing.

Thus we may suppose topographical facts of the most vital importance to have been learned. In a subsequent lesson, a little green-crayon dust, laid on with the finger-tip, may indicate fertile valleys; white

dots or lines, snow-covered mountain ranges or peaks; various depths of the sea, and other things, may be marked, and the topography is disposed of. Now political boundaries are marked. So, for instance, a State is "cut out" by white or colored crayon; canals and trunk-roads are entered upon the map; and I need not say that the location of cities forms a most valuable and entertaining lesson.

The fact that whatever geographical data are spread upon the map may be easily and safely removed without the least injury to body or surface of the map, gives an opportunity for the pupils to be self-active; and these "practice maps" are therefore a most welcome medium of instruction. They are also distinguished from others now in use, by containing no lettering, and therefore present a more perfect image of the country portrayed. The names on the map used by children are like ponies and keys in arithmetic, and only disfigure the map, and confuse the mental picture. These "practice maps" do not displace the ordinary printed maps, so long as our teachers are not omniscient. When the pupils have thus learned geography by degrees, it is well to permit them to consult liberally stocked maps. Primer and reading charts naturally precede the dictionary and complete works of authors.

To give due honor to truth, we all labor more or less under the delusion that a map is *good* when it contains *much;* that it is poor when it contains little. In the common sense of the term, the word "good" is

not misapplied. The map of a military leader must contain every turnpike, path, hamlet, brook, creek, bridge, marsh, grove, hill, etc., if it is to be a good map. A commercial map, if it come up to the merchant's idea, must contain all the information of value to him: I need not enumerate these things. The geometer, again, has a different standard of value. And so have we ours. A map for the schoolroom should contain what the children are to learn; certainly very little if aught more. To give into the hands of children, or hang up for use, an overstocked map, is like giving the children a lexicon instead of a reader. In teaching literature, we give them selections, and object to complete works of authors. In history, we use mere skeletons of data and facts, and supply the remainder by word of mouth. In every branch of study, we leave the limits of the matter of instruction to the discretion of the teacher. Why not do so in geography? Why should we put up with overloaded maps?

I have asked the question elsewhere, and the timid answer came: "We have to take what the publishers offer us." I do not believe this need be the case. The publishers are merchants. The steady force of the law of supply and demand, and the sleepless instinct of gain, determine what they should offer for sale. If such maps as these "practice maps" were wanted by a great number of teachers, you may depend upon it, they would make their appearance in due season. No: the fault lies with the teachers, and

with the unnatural and irrational method of teaching in vogue all over the country; it lies with the school-authorities, who in many cases labor under the common error that the more a map contains, the more perfect it must be.

Sensible teachers have helped themselves by resorting to the blackboard. They sketched or drew the outlines of the map, traced the water-courses with blue crayon, and then proceeded as indicated before, — that is, spread upon the map by degrees all information of value, until the pupils' knowledge was extended enough, and their comprehension developed enough, to make sensible use of printed maps. But I have noticed in these cases a great waste of time, much unavoidable inaccuracy on the part of the teacher, and many misconceptions on the part of the pupils.

I have little to say upon the subject, as far as it concerns the upper grades of the grammar school and the high school. There maps may be used which are liberally furnished with information, provided rational instruction has preceded in the lower schools. Teachers of higher grades have just cause for complaint. Their pupils have not acquired a knowledge of geography as they should have done. The memory (evidently the faculty upon which we have to rely most in teaching geography) retains willingly only that which has gone through reason and understanding. Whatever the mind does not grasp is difficult to remember. Not every thing to be learned can be understood, however: still we may make it palatable and digestible by

connecting with it incidents of interest. So, for instance, a child who hears the laughable story which led to the naming of Cape Finisterre, and the trivial reason for the naming of Cape Cod, or Cape Farewell, or Cape Verd, etc., will not easily forget these names. All this is so self-evident, that I feel as if I paid small compliment to you by repeating it. But I do it to point out the utter absurdity of learning geography from the printed text. Here are a few tidbits of information as found in some geographies: —

"Zenith and Nadir are two Arabic words imparting their own signification." (How lucid!) "Land is either level or diversified by elevations or depressions." (How wonderfully clear to children this must be!) "Commerce consists in the exchange of commodities." (Is it possible?) "North America, lying in three zones, and traversed by lofty mountain ranges, is marked by astounding varieties of climate and productions." (Will not this cause mental dyspepsia?) "Extensive forests of deciduous trees cover this section." "Indian mounds of an unknown antiquity are found in Georgia." Verily, we cannot thank kind Providence enough for having gifted the human memory with the happy faculty of throwing off what has not gone through the mill of reason and understanding. What a frightful waste of energy is there in schools where such unpalatable and indigestible matter is set before the pupils who are told to "study" their geography lesson!

I cannot refrain from quoting Goethe; the tempta-

tion is too great. We find in "Goetz von Berlichingen" the following conversation. Goetz, Lord of Jaxthausen, returns home, and meets his son Carl.

Carl. "Good-morning, father!"

Goetz (kisses him). "Good-morning, boy! How have you all spent your time?"

Carl. "Well, good father. Auntie says I was right good."

Goetz. "Indeed?"

Carl. "I have learned a great deal."

Goetz. "Indeed?"

Carl. "Shall I tell you the story of the good boy?"

Goetz. "After dinner; not now."

Carl. "I know something else."

Goetz. "What may that be?"

Carl. "Jaxthausen is the name of a village and castle on the river Jaxt, belonging to the Lords of Berlichingen for the last two hundred years."

Goetz. "Do you know the Lord of Berlichingen?"

(Carl looks at him in mute astonishment.)

Goetz (aside). "The boy has become so learned, that he does not know his own father." (To the boy.) "To whom does Jaxthausen belong?"

Carl (reciting). "Jaxthausen is the name of a village and castle on the river Jaxt" —

Goetz. "I did not ask for that." (Aside.) "I knew all the paths, roads, and fords, before I knew the name of river, castle, and village."

Now I do not mean to accuse the teachers of to-day

of teaching with such results as Goethe here describes it to have been done in the Middle Ages. But I mean to state, that we are constantly subjected to the temptation to thus teach geography, as long as we have text-books. What can a teacher mean when assigning a lesson in such a book? What else than to commit verbally to memory such and such a page? That this is literally true, is seen the next day, when he "hears his classes." He conducts recitations. What is a recitation? Webster and Worcester say, "A recitation is a repetition of something committed to memory."

Now, I certainly do not denounce recitations in geography, or in any other study, for I want my pupils to frequently repeat what they have learned; but I expect and require them to do it in their own words. A definition wrought out in the mind of the child by his own self-activity, even if it do not cover the entirety of the subject, is vastly better than one committed from the printed page.

To sum up. The ideal method in the lower grades, of course, is to let the children make the acquaintance of Mother Nature herself. That being out of the question in many cases, we can imitate her, and mould those objects which will give the primary notions and ideas absolutely necessary for the subsequent abstract instruction. When these primary ideas are well established, when the child has become acquainted with the position of the schoolhouse, yard, and neighborhood, with the cardinal points, with the city and its vicinity, with the river, or the lake, as the case may be, when

he has gained some definite ideas of distance, when he is able to comprehend the relation between reality and its representation, then such practice-maps as I have described, both relief and flat-surfaced maps, and, in the absence of these, the blackboard, may be used. We must remember that "a good teacher is known from the intensity of attention with which the pupils follow his instruction, and from the amount of crayon he uses." And, as to text-books, let them be atlases, containing no text whatever. The maps should be elementary maps, not overstocked with data and lettering of all kinds, tending to blur the child's image of the respective country or section. Let these maps be accompanied by illustrations of cities, landscapes, vegetable productions, animals, modes of communication, occupations, buildings, etc. *But do away with the terrible temptation to make the pupils thoughtless prattlers.*

HISTORY AND GEOGRAPHY, THE SIAMESE TWINS.

I.

John. — "Teacher, I wonder why the southern boundary of the State of Michigan is not one continued straight line."

Answer. — "Well, my boy, thereby hangs a tale. Do you know the boundaries of the former Northwestern Territory?"

John. — "Yes, sir: it was all the land north of the

Ohio, east of the Mississippi, south of the lakes, and west of Pennsylvania."

Answer. — "When, in the year 1802, a sufficient number of people had settled in that part of the Northwestern Territory now known as the State of Ohio, to ask for admission into the Union, the request was

granted by Congress. It made very little difficulty to settle the boundaries of the new State. The western boundary of Pennsylvania was a surveyed line: that naturally became the boundary also of Ohio. On the south they had the Ohio River as a boundary, because south of that the States of Virginia and Kentucky were situated. On the north Lake Erie was a natural bound-

ary. All that remained to be settled was a western and partly also a northern boundary. Now, that partial boundary was found by drawing a straight line from the most western extremity of Lake Erie to the most southern extremity of Lake Michigan [see the above cut]. The western boundary was found by starting at the Ohio River near the mouth of the Big Miami River and going northward on a line with the meridian until the line was struck which was drawn between the two lakes, Erie and Michigan. Thus the boundary of Ohio was settled, and the people were satisfied.

"When, fourteen years later, in 1816, the Territory of Indiana expressed the desire to be admitted into the Union as a State, Congress complied with the request, suggesting that the surveyed line between the two lakes — namely, between the two extremities of the two lakes — be taken for the northern boundary, and that from the point of the most southern extension of Lake Michigan a line be drawn on a line with the meridian until the Wabash River was reached. [These lines will be found in the above cut as represented by solid black lines.] But the people then residing in the Territory clamored for a more equitable adjustment of the boundary of the new State. 'For,' said they, 'the lines suggested defraud us entirely of lake-front.' This was a well-founded objection; and therefore the northern boundary was extended somewhat toward the north, and the western somewhat toward the west. [Indicated in the above cut by dotted lines.] This

gave the State of Indiana a sufficient stretch of lake-front; and the present town, Michigan City, situated there, proves the wisdom of the step taken by the boundary commission.

"When, some years afterward, the Territory of Illinois was to be admitted into the Union, the old originally surveyed line between the two lakes, it was suggested, should be extended to the Mississippi River, and thus the northern boundary of Illinois settled. This met with the same objection mentioned above. The people of Illinois claimed a portion of lake-front: therefore the northern boundary of Illinois was established considerably north of the original line."

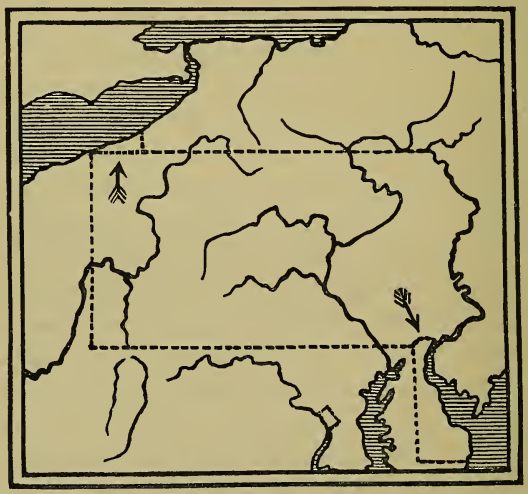
John. — "That sounds reasonable; but why should the so-called Superior peninsula [see cut, the shaded portion of land] belong to the State of Michigan? It seems as if by rights it should belong to Wisconsin."

Answer. — "Well, my boy, thereby hangs another tale. In the year 1835, the State of Ohio and the Territory of Michigan had quite a heated dispute over certain boundary questions. A strip of land was claimed by both. Both governors called out the militia, and war was declared between the two 'great powers;' but it did not come to any blows. Congress mediated, and settled the dispute by offering Michigan the peninsula south of Lake Superior, and promising the Territory admission into the Union as a State. The government of the Territory accepted the terms, and relinquished its claim upon Ohio. This ridiculous squabble made a great *furore* at the time, but is now

forgotten, as every other squabble will be forgotten. The histories do not speak of it, since history is a narration of memorable events; and, no memorable event having happened in connection with this occurrence, history has had nothing to record. Yet withal Michigan owns that peninsula, my boy, and don't you forget it."

II.

John. — "Here is another odd corner, professor. What is the object of this triangle?" (pointing toward



the triangle belonging to the State of Pennsylvania, bordering on Lake Erie, on which the city of Erie is situated.)

Answer. — "Well, my boy, there is but little of a

tale connected with that. When the original Colonies, New York, Pennsylvania, Maryland, Virginia, Carolina, and so on, settled their boundaries, they took certain parallels for boundary-lines. It so happened that the northern boundary of Pennsylvania reached Lake Erie at the same point where now its western boundary reaches it. This deprived Pennsylvania entirely of lake-front; and in order to acquire some, it was obliged to purchase from the Colony of New York, afterward State of New York, that strip of land known as the Pennsylvania triangle. It was of great importance to the State that it should have lake-front; for at the time, when there were no railroads, navigation on the lakes, rivers, and canals was of greater importance than it is now, although at present navigation may be greater than it used to be. What Pennsylvania paid for the strip of land, is immaterial."

John. — "But there is another oddity about the boundaries of Pennsylvania. I notice that there is between Delaware and Pennsylvania a perfect arc. Is not that rather an arbitrary way of establishing a boundary?

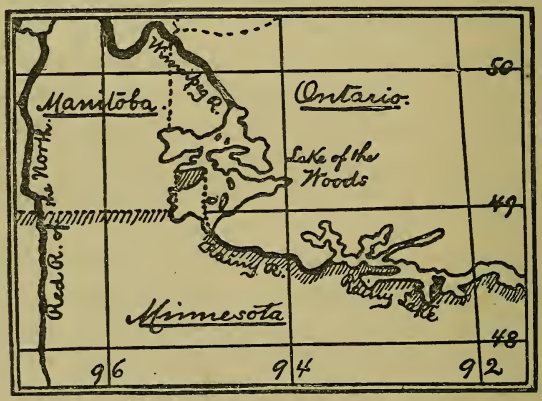
Answer. — "Yes, I think it is, and 'arbitrary' is the proper term in this case; for, when a dispute arose about the establishment of that boundary (the surveyors at that time were not of the highest type of civil engineers, and had very rude instruments), some one applied a compass on the map, setting one foot of it at a certain projection on the banks of the Delaware River, and described a perfect arc. This arbitrary

line happened to be such a happy compromise, which divided all claims equally, that it was immediately adopted by the contesting parties.

"And now, my boy, look at Alabama. Why should Florida claim so much coast which apparently belongs to Alabama? And why, again, should it deprive Georgia entirely of an approach to the Gulf of Mexico? There is a question for you to settle. You can easily answer it by consulting the history that refers to the acquisition of Florida by the United States. Do it, and report to-morrow."

III.

John. — "I discovered a curious 'freak of nature,' professor, if so I may be permitted to call it. It is a



'horn' on the northern boundary of the United States, which seems so out of place, that I cannot account for it. It appears, the boundary crosses one section of

the Lake of the Woods, and encloses a triangular peninsula, and then goes southward till it reaches the forty-ninth parallel, along which it proceeds till it touches the Pacific. I am strongly tempted to ask, 'why is this thusly?'"

Answer. — "Well, my boy, every historical event leaves its traces behind. It is in history very much as it is in nature, and cause and effect are ever noticeable. I will deviate a little, and give you an illustration from the Darwinian theory. You know that during the last century the coats of soldiers were worn in a fashion which required two buttons in the back of the coat. The front of the skirt was folded back, and fastened by two buttons. You will recollect having seen a picture of Frederick the Great, or of Washington, in their uniforms; and there you will have noticed the fashion referred to. In our time, that fashion has disappeared, and the skirt of the frock-coat is permitted to fall. The buttons still remain, for no practical use that we can see. They are a remnant of a former fashion, just as the small bow which we fasten to our shirt-collar by a hook is the remnant of a cravat which used to be several yards long, and was wound around the neck ever so often.

"Now, this horn on our northern boundary is also a remnant, or, let me say, a witness, of certain historical events of interest to us as Americans. Let me first say, that the sources of the Mississippi River were not known at the time when the Mississippi was made the boundary between the great French possession, called

Louisiana, and our original thirteen States: perhaps it was supposed to rise from the Lake of the Woods. It was settled by the boundary commission, convened in Paris, that the boundary between Louisiana and the United States should be the Mississippi River; and the line should be followed till it reached a point 49° 40′; that is, forty-nine degrees and forty minutes north latitude. It is interesting to hear why the forty-ninth degree of latitude was chosen; namely, because it is the latitude of Paris. Now, if you will please notice, my boy, this horn is exactly forty minutes of a degree in length. That forty minutes has never been called in question.

"But another thing greatly agitated the minds of the citizens of the United States during Polk's administration. It was the boundary between the land west of the Rocky Mountains, and British America. The United States had claimed some territory north of this line, as far as Alaska, latitude 54° 40′; and Great Britain had claimed the territory south of this line to the Columbia River. A large party in the United States preferred war with Great Britain to giving up the American claim. They demanded 'Fifty-four forty, or fight.' But by a treaty both Great Britain and the United States gave up part of their claims, and took a middle line as the boundary."

"A very alliterative battle-cry, to be sure," says John.

"You know yourself what parallel was finally agreed upon as a compromise. But the curious thing that I

call your attention to is, that the triangular part cut off by the horn referred to is not approachable from the United States, except by water. [Consult the foregoing cut.]

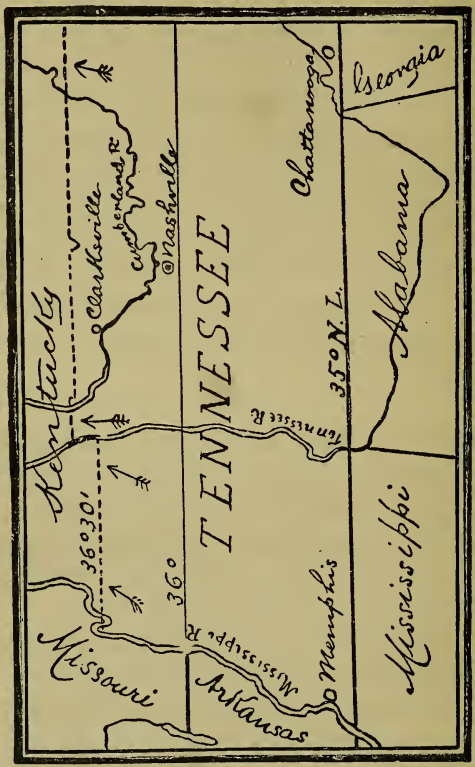
"Now, John, just look back into history. Think of the dark days at the time of the birth of our Union. See the sturdy, honest, enthusiastic Ben Franklin, in his simple Quaker garments, at the sumptuous court of Louis XVI. in the gay city of Paris, fighting with the tenacity of a true Yankee for his own country and for as much territory as could be wrested from England, Spain, and France. That little notch in the Canadian boundary is a memento of a noble time, full of promise; of great men full of noble virtues. It is a relic of 1783."

IV.

John. — "Is there a tale connected with the notch in the boundary between Kentucky and Tennessee, professor? It seems odd that the straight line from the coast to the Tennessee River, some seven hundred miles in length, should not have been continued till it reached the Mississippi River."

Answer. — "Well, my boy, this notch, as you call it, certainly troubles all common ideas of the eternal fitness of things. But there is no exciting tale connected with it, unless an example of wise, not to say shrewd, statesmanship may excite our curiosity. The line between Kentucky and Tennessee is not at all a straight line, not even from the Cumberland Mountains to the Tennessee River, but is very irregular,

varying between 36° 31′ 25″ and 36° 40′ 45″; though our school geographies and maps represent that line as



being so beautifully straight, that it might make a mathematician's heart glad. I searched a long time for the cause of the irregularity referred to, until, by

the rare kindness of a friend in Tennessee, I was put in possession of facts which explain it.

"Capt. U. C. Garrett of Nashville published a pamphlet, some years ago, entitled 'The Northern Boundary of Tennessee,' from which I glean the following essential points: —

"'The territory now occupied by the two States — Kentucky and Tennessee — was formerly part of the States of Virginia and North Carolina. Kentucky is the daughter of Virginia, Tennessee the daughter of North Carolina. It is not necessary to refer back to the colonial history, and see how the dividing line was shifted repeatedly. Suffice it to say, that it had been finally fixed at thirty-six degrees thirty minutes north latitude, as early as the year 1728. After three hundred and twenty-nine miles of this boundary (beginning at the coast of the Atlantic) had been surveyed from time to time, and marked, no other step was taken in the location of the boundary until after the beginning of the Revolution. I quote Capt. Garrett: —

"'In 1779, urged by pressing demands from their Western settlers, the legislatures of the two States (Virginia and North Carolina) found time, in the midst of the Revolutionary struggle, to appoint a commission to extend their boundary. The commissioners, Henderson and W. B. Smith on the part of North Carolina, and Walker and Daniel Smith on the part of Virginia, met in September, 1779. They failed to find the point at which a former commission ended their line on Steep Rock Creek. Memoranda

of agreement were entered on the books of both parties to the effect that the point of observation was in north latitude 36° 31′ 25″, and in west longitude 81° 12″. They ran due south one mile to a point supposed to be in latitude 36° 30′, "to the satisfaction of all."

"'From this point they ran a line, which they supposed to be due west, about forty-five miles to Carter's Valley. Here a disagreement occurred, and the two surveying parties separated, running parallel lines about two miles apart; the line of the Carolina commissioners, generally known as *Henderson's Line*, being north of the line of the Virginia commissioners, commonly called *Walker's Line*. The Carolina commissioners continued their line as far as Cumberland Mountains. At this point, they abandoned the work, after sending a letter of protest against Walker's Line. The Virginia commissioners continued to Tennessee River, and then, although not authorized to extend the line beyond Tennessee River, proceeded to mark its termination on the Mississippi; but did not survey the intervening distance.

"'*In consequence of the failure to make due allowance for the variation of the needle, Walker's Line deflected continuously to the north.* Either on account of the imperfection of their astronomical instruments, or from a failure to test their work by a sufficient number of astronomical observations, the commissioners seemed not to detect, or at least did not correct, this constant northward deflection. Walker's Line first

touched Tennessee near latitude 36° 34′, and reached Tennessee River near latitude 36° 40′, *more than twelve miles too far north in a direct line, or about seventeen miles by way of the river.* This fact has been established by subsequent surveys with more accurate instruments. Henderson's Line, running two miles north of Walker's Line, was still further wrong.' "

The line really varies from the coast to Tennessee River, between latitude 36° 29′ 54″ and 36° 40′ 45″, a difference of about eleven minutes. Of course, when subsequently the two States (Kentucky and Tennessee) were obliged to adjust the annoying disputes arising from these irregularities, it was finally agreed upon to accept Walker's Line as far as Tennessee River, and from there to the Mississippi locate the boundary upon the latitude 36° 30′. This caused the "notch." The agreement was arrived at only after several years of bickering and contention between the two States.

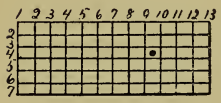
The many changes from the true line 36° 30′ can be accurately seen on the latest map of the General Land Office. But even this map fails to give location to the V-shaped notch marked in the foregoing sketch-map. I am unable to account for it, nor does Capt. Garrett mention it. This little, and perhaps, for all practical purposes of school education, insignificant trifle, is not the only one found on the map. Massachusetts shows a similar oddity in its southern line. The mention of this may, perhaps, induce some one

of the readers of this article to give a reason for the notch, or "show cause why the line should not be straight."

PARALLELS AND MERIDIANS.

THIS subject needs an introductory lesson. The following suggestions have been found very serviceable. Clear the board. Make a large parallelogram.

Then make a dot within the figure, it is immaterial where. Ask the class to locate the dot. The answer will come, "It is difficult to tell." Some one will venture to say, "It is a little toward the right-hand upper corner," which is too indefinite a statement. Then make a number of parallel vertical lines which divide the figure into strips, and number the lines, beginning with 1. Again make a dot in one of the strips, and ask to locate it. This time the pupil will say, "It is between lines 9 and 10."



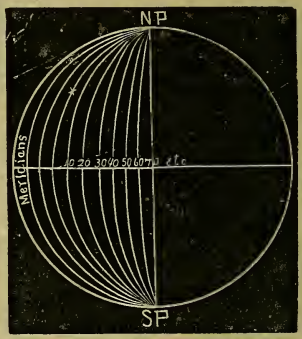
Then cross the vertical by a number of horizontal lines. Number them also. Now it is easy to locate the dot. It will be found to be between the lines 9 and 10, and between the horizontal lines 3 and 4. Make a number of other dots, squares, stars, rings, and triangles, within the figure thus prepared, and let them

all be located. Now interrupt the lesson to wedge in a little necessary language and spelling. The words *horizontal*, *perpendicular*, *vertical*, and *parallel* should be placed on the board, underneath each other. Then their definitions and derivations are given: horizontal, from *horizon;* perpendicular, from *pend*, to hang (depend, to be suspended); vertical, from *vertex*, the highest point, the top. The best illustration to make the words *horizon* and *horizontal* clear, I have found in this: —

Picture a plate, say a butter-dish, with a globe over it. Say, suppose a fly to sit in the middle of that dish. His vision will be bounded by the line where the globe touches the edge of the plate. See geography: "The horizon is the line where the sky seems to touch the earth." The perpendicular can be illustrated by the pendulum of the clock in the schoolroom.

Now erase your figure, draw a circle, and put a line from pole to pole and the equator in. (See cuts on p. 284.) Explain that the words *equal* and *equator* are cousins, not very far removed either. Draw nine parallels, curved lines, and say you have not the time to make ninety of them, each one, therefore, is to represent the tenth. Show them, that from one pole to the equator there are ninety of such parallels, and again

from the equator to the other pole ninety, and so on, making three hundred and sixty in all. Then introduce the meridians, also curved lines, meeting at the poles. They being all of the same size, show that it is difficult to tell where to begin to count. With the parallels it is easy: beginning at the equator, we go north and south. Tell that in former years nearly



every nation had its own meridian, the English that of Greenwich, the Americans that of Washington, the French that of Paris, the Germans that passing through the island of Ferro; but that in a convention at Washington the representatives of the different civilized nations had agreed to adopt a uniform first meridian, namely that passing through the observatory at Greenwich near London. Show that *meridian* is a combination or corruption of two words, namely *medius* and *dies;* the first meaning middle, the second day, hence *midday*. Consult Webster, who says, "Varro testifies

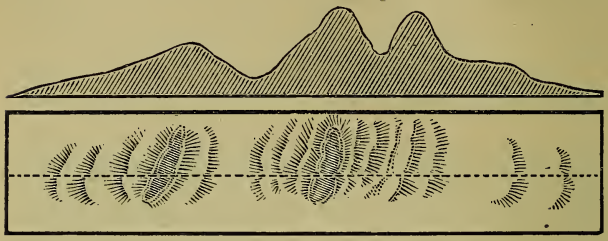
that this word was originally spelled *medidies*, and that he had seen it thus on a sun-dial."

Now, concentration of effort will lead us to the question, Why should the number of parallels, as well as meridians, be three hundred and sixty? Mental arithmetic will come in for a little share of attention, and it is the chapter of divisibility of numbers which will come in handsomely. The number three hundred and sixty was not chosen arbitrarily, but for a good reason; namely, because it can be divided by one, two, three, four, five, six, eight, nine, and ten, in fine, by all numbers within ten, except seven. Never mind whether you are the teacher of arithmetic, or not: let the pupils verify the statement that the number three hundred and sixty is divisible by the numbers mentioned. It will lead them to see that all knowledge is more or less related; and by thus connecting different branches, you assist in deepening previously gained cognitions, or opening vistas into other compartments of knowledge whose doors were locked before.

A POSER.

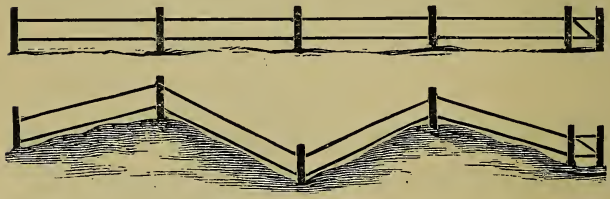
We were looking up on the map the boundaries of certain States, one day, in a C grammar class. Noticing the number of mountain ranges drawn across the boundary-line, or rather noticing that the line crossed a range of mountains, I asked, "Does not this boundary line in reality go up and down? In other words, is it not diversified by mountains and valleys?" Answer: "Yes, of course." Question: "Then, how

is it, that the map-maker can draw the southern line of Pennsylvania, for instance, with the aid of a ruler?" That question was a poser. We turned to other states, the surface of which we knew was greatly



diversified, and not as level as that of Illinois. Even the most precocious boys and girls of the class began to look solemn.

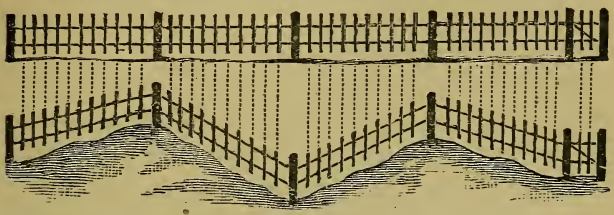
I then proceeded to give them this problem: "The north side of a farm is perfectly level; the south side



is diversified by gullies and knolls. The owner intends to build a picket-fence both on the north and south sides. Question: On which side will he need the greater number of pickets?" And in order to make the problem very clear, I hastily drew the above dia-

gram on the board. The class agreed instantly, that, for building the fence on the south side, a greater number of pickets was needed, the distance being so much greater.

Then I completed the diagram, as is shown in Fig. 3; and the astonishment of the class was a sight worth seeing when they discovered that the number of pickets



was the same in both fences. I permitted them to laugh to their heart's content over their own mistake, and then I showed them the relation between this illustration, and the first question of the lesson; namely, How can a State line be represented as a straight line on a flat-surfaced map, when in reality it is diversified by huge elevations and deep depressions?

LIFE CONTRADICTING THE SCHOOL-MASTER.

Are you aware, dear reader, that there is in our present mode of teaching geography something wholly incompatible with the requirements of life? One of the most important principles of instruction is: Whatever you teach, teach it with a view toward its future use and practicability. Heed life's demands. If you do not, you may be, nay will be, blamed for neglecting

a part of your duty which is of no mean importance. The often-heard appeal, that the formal aim of education should be considered as more valuable than the material aim, has but an infirm foundation. It is simply a preposterous prevarication. The great number of graduates who are flat failures in business, and the numerous cases of learned men who are as helpless as children in business, preach louder than the most eloquent apostle of modern education.

Behind that plea, is hidden a most lamentable pedagogical error. A master who requires his pupils to learn by heart, *verbatim et literatim*, one text-book after another, one rule after another, may plead the wonderful exercise it gives to the memory, may plead the astonishing development of this one faculty; but he *can* never, and I believe *will* never, plead that the harmonious growth of all the pupils' faculties is assisted by such practice. On the contrary, the memory, in this case, is fed at the expense of all the other faculties, which are thereby dwarfed and stunted. Besides, that the same exercise may be had by committing all the advertisements of a daily paper, or the Bible read backwards, without an iota of practical use in after-life, perhaps, never occurs to him.

It is one of the postulates of modern education, that the memory is best developed when exercised indirectly.

Behind that plea of aiding the formal part of education at the expense of the material and practical part, the master may hide himself, who exercises his

pupils' ingenuity and arithmetical skill by giving them problems in which the price of a cow is six cents, and that of a beefsteak sixty dollars. I saw such a problem on the blackboard not long ago; the answer was, "Cost of house and lot, three dollars and seventeen cents."

Now, to come to the point which I intended to bring out, much of what we teach in geography is *useless ballast.* For instance: It is required, in many schools, to burden the memory of children with an endless list of tributary rivers, of little if any importance. Did it ever occur to you, fair reader, that in life, in the intercourse with our fellow-men, we scarcely ever mention rivers, except when they are navigable by steamboats, or cause trouble by inundation? If a business man mentions a small river, it is perhaps in connection with his fishing excursion; but ask him whether he would have his boy taught the name and course of that river, and his answer will be a decided and sharp "No," and he will invariably add, "Teach him more useful things than such trash."

On the other hand, see how often we mention the *railroads.* Every newspaper reader is familiar with the New-York Central, the Pan Handle Route, the Baltimore and Ohio, the Lake Shore and Michigan Southern, the Queen and Crescent Route (Cincinnati Southern), the Union Pacific, etc.: I need not enumerate any further. Don't you think, my reader, it would be wiser to eliminate from our course of study most of those currentless, non-navigable water-veins,

that seem to be good only to drown a cat in occasionally, and for a portion of the Congressional "River and Harbor" appropriation semi-occasionally? Would it not be better to substitute the acquisition of knowledge regarding trunk railroads?

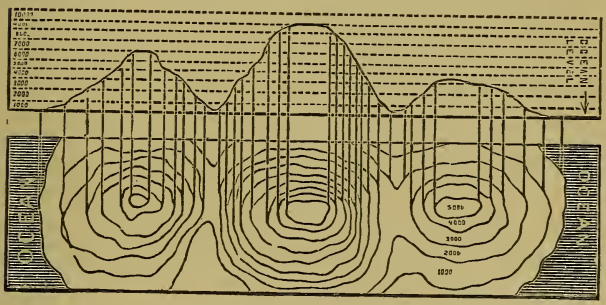
Life as it is, not as it was one hundred years ago, requires not near as many topographical minutiæ as text-book authors would have us believe. It seems to me of vast importance, that our pupils learn *more mercantile geography.* I offer this suggestion for what it is worth. Make the best of it.

ONE WAY OF GETTING AT THE IDEA.

It is well known by observant teachers, that children are easily confused by the great multiplicity of detail on wall-maps. Especially the elevations trouble them. The usual manner in which they are drawn is not the most commendable. The map-makers of Europe and America do not agree on a uniform treatment of this subject. This can be seen from the specimen pages of topographical maps laid before the public by Capt. Wheeler, the American representative at the late geographical congress at Venice. Among these maps, the manners used by the topographical engineers in France and Switzerland are by far the best; and I must say, if I had to choose between these two, I should consider the French mode preferable, because it can be imitated in school without difficulty, while the Swiss manner of representing elevations necessitates skill in drawing and shading. In saying this I am, perhaps,

prejudiced, having used the French manner of representing elevations for many years. I may be further prejudiced in my choice by the fact that the United-States Topographical Engineering Corps has adopted the French mode, and as far back as 1861 (during the civil war) has represented flat-surfaced maps in the same way.

This French method consists in curves representing different altitudes, as is shown in the cut below. This



cut can easily be copied by the teacher on the board, and very little explanation is needed to make it understood. The upper half is a longitudinal cross-section of some mountains; the lower half represents the same mountains in a flat-surface map, and the vertical lines connecting the two parts of the cut indicate different altitudes.

I believe that if the elevations on our school-maps were treated likewise, — that is, with curves, and perhaps a trifle of shading, indicating very steep elevations, — the maps would be understood much more

readily. As they are now, they represent mountain ranges by scrawling figures that look like caterpillars. In the above cut the different curvatures represent water-lines, separated each by a thousand feet.

ODD QUESTIONS ODDLY ANSWERED.

As an instructor in a Southern State teachers' institute, I advised my hearers to submit some such questions in the study of geography as are here appended. Only geographical answers should be admitted. I was greatly pleased, when next day, one of my pupils handed me the answers as they are found below in rhyme. The author of the questions, I am sorry to say, is unknown to the writer.

QUESTIONS.

ONLY GEOGRAPHICAL ANSWERS TO BE GIVEN.

What has a mouth, but cannot bite?
What has an arm, but cannot write?
What has a foot, but cannot walk?
What has a head, but cannot talk?
What has a bank with no money in?
What has a top, but cannot spin?
What has a neck, but has no head?
What never sleeps, but has a bed?
What hook will never catch a fish?
What has a basin, but not a dish?
Where are the locks, keys never turn?
Where are the capes that are not worn?
What has a branch, but has no leaves?
What has no locks, but has some keys?
What always falls, but gets no scratches?

What is the ball that no one catches ?
What is quite long, but is not tall ?
What has a base, but plays no ball ?
What are the poles nobody climbs ?
Where are the boys to answer these rhymes ?

ANSWERS.

FURNISHED BY MRS. B. W. HARD, GRANITEVILLE, S.C.

A *river* has a *mouth*, does it follow that it *bites ?*
The salt *sea* has an *arm*, but never, never *writes.*
A *hill* has but a single *foot*, and therefore cannot *walk.*
A *river* has a *head*, but it takes brains to *talk.*
The river's *bank* is broken, for it has *no money* in it.
The lofty *mountain* has a *top*, but who has strength to *spin* it ?
The *land* on which we live has *necks*, but has no *heads.*
The *rivers* never *sleep*, but are restless in their *beds.*
Old *Sandy Hook*, on Jersey shore, will never *catch a fish.*
Lake Erie holds its water in a *basin*, not a *dish.*
In Scotia's rugged land are lovely lakes or *locks*, sunlit [1].
Along the coast of every land are *capes* that do not *fit.*
A river has its *branches*, but is not adorned with *leaves.*
And Florida, our flowery land, has quite a bunch of *keys.*
No scratch, no wound, Niagara gets in all its mighty *fall.*
No *base-ball club* will take our *Earth* from Atlas grim and tall.
A *railroad* may have any *length*, but has no *height* at all.
A mountain is too dignified to *play* a game of *ball.*
At North and South are *poles* of ice, which no one tries to *climb.*
I trust Professor K——— will not criticise my rhyme.

ELEMENTARY WORK.—THE ZONES.

A TEACHER of the fourth primary grade asked me once how she could appeal to the senses when she taught the subject of zones. She had racked her

[1] Canal locks need no keys.

brain to find a suitable appellation to the children's experience and circle of thought. I called her attention to the stove; saying that the room had a torrid, temperate, and frigid zone, and that it should not be difficult to make the children see that some of them were sitting in the torrid, others in the temperate, and again others in the frigid zone of the room. She might show it by means of the thermometer. While some were sitting in a temperature of 80°, the greater part of the pupils had the advantage of enjoying a medium temperature of 65°, while some poor mortals sitting near the windows were obliged to suffer in a temperature of 50°. Then I called her attention to the easy way in which the idea belt, relating to zones, might be illustrated by a chalk-mark on the floor all around the stove. From there to the next step would be easy. I suggested to her to make a very large circle on the board, which was to represent the earth, and in the right-hand upper corner a small circle which was to represent the sun; then, to connect the circumference of the two circles by straight lines, not parallel, but diverging, to represent beams of light and heat. She could show, that some of the rays were short, others long, and thereby again establish the fact that the difference in distance, and the slant of the rays, caused the difference in temperature; in other words, the zones. I offer this suggestion to others. It is a simple, homely illustration, but it goes straight to the point.

CHAPTER IX.

HISTORY OF EDUCATION.

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EDUCATION IN ROME.

(AFTER DITTES' HISTORY OF EDUCATION.)

THE characteristic feature of the Romans was practical *common-sense*. They did not, like the Athenians and other Greeks, philosophize much. In all questions and relations of life, they searched for the practical side. They considered things very much in the same way in which the proverbial American looks at them. A few examples may illustrate this.

The glorious philosophic truisms upon which the grand structure of our government is built, towering up into lofty heights, a landmark for all nations on the face of the earth, — these principles were not originated among the founders of the Union. They are found in the examples of ancient and mediæval history, in the works of English, Dutch, German, and French philosophers of several centuries ago. Nor did the founders of the Union pretend to have discovered any thing new; but their common-sense applied old truth and old experience, tested them, and found many of them of use. With admirable tact they

strove for the realization of the attainable; and, with wise discretion, they eliminated all that was not actually useful or applicable under existing circumstances. So long as the accumulated political wisdom of the Old World was confined within sheepskin and library walls, it was scarcely worth the paper upon which it was printed. Here, upon the virgin soil of a new continent, the creative spirit of the people, prompted by instinctive (or shall I say eminently wise?) eclecticism, realized them.

The telegraph and the telephone, as has been proven, were discovered in Europe; but the inventors, though highly gratified at having solved important problems, did not for years utilize their inventions. It was left to American inventive genius, coupled with admirable skill of application, to turn these, and, in fact, many other inventions, to account.

Or, to come nearer the question under discussion, see what the American practical teacher makes of the profound systems and philosophic maxims of Comenius, Pestalozzi, Froebel, and Diesterweg. Of all the educational advice offered by these immortal teachers, American eclecticism accepts just enough to flavor American education, as the cook squeezes a lemon to give flavor to a dish. I do not find fault with this, not at all. To comprehend a thing, means to pardon it; that is to say, means to see the causes of it.[1]

[1] A writer, in a recent number of the North-American Review, says, "We are far more Roman than English. Indeed, the most extraordinary feature of the American is his un-Englishness. The chief experiences of

This, then, is what is meant when I say the difference between Greeks and Romans was, that the latter were practical. They were a matter-of-fact people; while the Greeks were, to a great extent, philosophic dreamers. Of the culture of every nation whom the Romans conquered, they accepted only those features which seemed to them useful. They made use of the fruits of education and civilization of the Greeks, for they felt that Greek culture was vastly better than theirs: they felt the intellectual superiority of their victims. However, they adopted only so much of it as seemed to them compatible with their life and national institutions.

The same eclecticism that had played a great part through all the centuries of Roman history, up to the time when the Romans came into close contact with the Greeks, — this same eclecticism is plainly visible in their educational system. That which, with the Greeks, was end and aim, namely, the representation

the Roman people were what ours have been, — war, trade, and sudden expansion into national greatness, an expansion so rapid and immense as to overshadow and mar the serenity and order of social life. Material prosperity and political administration were the leading pursuits. Rome and America have loved luxury and pomp. Each civilization might be called a political success; both must be judged social failures. Rome loved the big. It seemed in harmony with the prodigious growth of Roman populations and the gigantic spread of the imperial system. Size, brute mass, the big figures of the census, are our pride. Like the Romans, we adore quantity. American civilization and taste, American life and problems, are singularly Roman. Discussions in Roman history as to the ratios of the precious metals . . . sound tiresome like the struggle . . . here and to-day. Monopoly and administrative reform brought about party changes then, as they do now."

of the beautiful and the good in art, was with the Romans a mere means for civil and political purposes. Thus, for instance, rhetoric. In Greece it was a great accomplishment to be a fine orator, not primarily for grand political ends. The Greeks studied oratory for its own sake; the Romans, for the purpose of making great political conquests.

Other arts — music, for instance — were considered professional occupations among the Greeks: with the Romans, they were accomplishments acquired for the purpose of filling leisure hours.

In one thing the Romans never learned from others. In law they may be said to have been geniuses. The wonderful Roman law has found its way into the codes of all civilized nations, and has maintained its foothold as securely as Greek forms have in art, which are to this day considered the ideals of artistic beauty. There was nothing borrowed in Roman law: it was indigenous to the soil. The ambition for conquest made the Romans warriors, and the desire to govern the nations round about the then known world made them see to it that laws were made which would organically combine the different and heterogeneous nations into one great empire.

The two great ideas around which centred all Roman thought were liberty and justice. Four means were given to work harmoniously toward propagating these ideas, — religion, legislation, family, and school.

The education of children was a matter of family concern, and family life was regarded very highly.

The woman was not, as in Greece, considered too inferior to take into account. On the contrary, we find women highly respected. The matron, or mother of the family, was the ruling spirit at home. The children were kept under her guidance till they were fifteen years old. Before a child was three days old, its name was entered upon the civil roll. Usually, festivities were connected with what was known as the "purification" and naming of the child. After seven months another festival was celebrated, that of the first tooth; and at the end of two years, that of weaning. In fact, the child was considered a source of great rejoicing, and a cause of many festivities. A mother who could boast of well-mannered children had reason for being proud. It is scarcely necessary to refer to Cornelia, the mother of the Gracchi: she stands out in bold relief in the history of education.

In contemplating these laudable conditions of home-life, it is well, though, to remember that they existed only during the better part of Roman history; namely, during the beautiful days of the republic. Later, when the republic degenerated to an oligarchy, and still later, when the capricious will of emperors became law, family life lost its sanctity. Every new victory over a foreign enemy gave fresh strength to the inner enemy. And in the same proportion in which Rome's outer glory increased, and the state seemed to gain materially and intellectually, in the same proportion crumbled to pieces the ancient firm foundations of the republic, and its simple, honest customs. Never, in

all history, have natural cause and effect found a more impressive illustration, than in the decline of the Roman republic.

Of all the nations with which Rome came into contact, not one has had such a destructive influence upon Roman institutions as the Greek nation did. And upon none of them have the Greeks had a greater influence than upon Roman education, since the Romans ceded this domain to the Greeks at once. Seeing how far advanced the Greeks were in intellectual training and in the arts, they thought that knowledge of the Greek language, Greek art, Greek customs, — in short, Greek culture, must be taught by Greek teachers. So it became apparently necessary that Greek nurses, Greek tutors, Greek professors, Greek artists, Greek elocutionists, be employed; and soon Greek vices entered the homes of the Roman citizens.

During the time of Cincinnatus, Fabius, Fabricius, Curius, Julius Brutus, Gracchus, the home-life of the Romans was simplicity itself. Virtue and purity in words and actions were inculcated in the children. The boy grew up to be a temperate, gentle-mannered, upright man, whose veneration for father and mother was deep and lasting. The example of the parents was looked upon as the most influential medium of education. Yea, sometimes the father would take his son to public banquets, so as to be guarded by his presence, which would prevent him from falling into bad habit; for it was thought a criminal offence to commit a wrong in demeanor in the presence of children.

On the other hand, obedience of children to their elders, and reverence for old age, were expected and enforced. Traditions of the great and noble deeds of the forefathers, of Scævola, of Curius, etc., were handed down from race to race. They were sung to the accompaniment of the flute, and the boys would sit and listen with bated breath to these lays of heroic deeds.

The boy was taught by his father till he was fifteen years of age. The Greek custom of giving the boys a mentor — that is, a trusted slave as guide — soon found favor with the Romans. Later, this guide, called *custos*, was made the teacher of gymnastics and the elementary branches. During his boyhood the boy wore the *toga prætexta* (boy's garment); when he became a youth he was permitted to wear a man's garment, the *toga virilis*. It was the custom to send the youth out of the house, and to give him into the guardianship of a kinsman who practised law. This lawyer initiated him into the intricacies of Roman law. And two years later, after he had completed his seventeenth year, he was permitted to enter the army. As far back as 400 B.C., the Romans had schools for those who could not defray the expenses of private tutors; but these schools were private enterprises, not common schools. Much later, public schools came into existence; and since they were kept on the highways, market-places, and cross-roads, they were called schools *in triviis*. Our term "trivial" is derived from the word *triviis* (three ways — crossroads).

In nothing can the difference between Roman and Greek spirit be comprehended better than in the selection and treatment of the different branches of study. All instruction was gauged by its utility. In the humanizing influence of Greek gymnastics, the Romans could not believe. They accepted and adopted only so much of it as seemed necessary to strengthen the body, and make it fit for military service. All the beautiful exercises of the Greeks — wrestling, throwing of discos, etc. — was left to professional athletes, called gladiators, who were slaves. The Roman boys' play even had reference to practical utility. Upon the Mars Field military exercises were held, and the Tiber River afforded opportunity for exercises in swimming. Musical practice was despised by the Romans; dancing prohibited, except for slaves who were hired to make music and to dance for the amusement of their masters or the public.

Of the mathematics, the Romans taught only practical arithmetic, and of geometry only so much as related to mensuration.[1] Besides reading, writing, and arithmetic, Roman history and mythology were taught. But, singular as it may seem, the Greek language and rhetoric were considered the most necessary branches of study. From the time of the conquest of Greece, Grecian philosophers and professors migrated to Italy, and opened schools there for the purpose of interpreting their classic writers. Later, grammatical

[1] European teachers accuse us American teachers of giving too much attention to dollars and cents problems in arithmetic.

instruction became a *conditio sine qua non* of Roman education.

Thus we see, that, though the Romans had conquered the Greeks politically, the latter conquered the Romans intellectually.

Since there were actually only two honorable professions among the Romans, — namely, those of warriors and statesmen, — it is easily seen that all their educational efforts were directed toward perfection in these two professions. All the many thousands of other occupations and pursuits were left to slaves, to the Greeks, and other foreigners; in fact, to any one who had a mind to work. Even the physicians were Greeks.

The most powerful and influential school of the high-born, or wealthy Roman, was life itself. His knowledge of law and politics he gained very much in the same way in which American lawyers and politicians gain their knowledge. (Who does not recognize the same thing in our modern worship of the self-made man?) It was customary with the young Roman to attend court on the Forum, and thus to study law in the most practical way possible. In case he desired to become a military leader, he attached himself to a commander in the field; and since the Romans were always at war with somebody, opportunites for a brilliant military career were seldom wanting. Not that the Roman youth received much systematic military training. No: what he learned, he learned by keeping his eyes open, and by dire experience. Just so the

statesman learned his profession; namely, in the company of some renowned lawyer, with whom he visited the public assemblies and court-sessions. Circumspection, sharp penetration, ready wit, and sound judgment are all qualities which no book-wisdom will develop.

It is evident that Roman and Greek education, though repulsing each other in some ways, completed each other in others. For pure humanity, the ideal of the Greek and the practical proficiency of the Roman are but the two sides of one and the same educational purpose, namely, harmonious development. Neither the Greek one-sided philosophic education, nor the Roman one-sided practical training, could save the nation from the inevitable degeneration, nor could either one prolong its national spirit.

And soon came the end, — the glory of the empire. What else was it but the lustre of an imitation jewel? As rotten wood will shine forth in phosphorescent rays, so the Roman Empire, though brilliant in all outward appearances, was rotten to the core. The excavated walls of Pompeii bear witness to such shameful atrocities that they seem to us incredible. No author had the courage to chronicle them. Only the brushes and colors of artists proved to be vile enough for the occasion. How must such examples of vice and corruption have taken effect on youthful dispositions!

When, with the downfall of the republic, public life lost its significance, education became a mere outer polish. Practical utility, even, became impractical. The emperor's will became law, and his favor made

military leaders; and even the senators owed their elevation to him. The forms of Roman education remained the same; but they were without substance, empty and hollow. Words and appearances sufficed, when truth and action were wanting. But, in order to keep up appearances, many more artificial means are needed. Education in Rome, during the time of the emperors, resembled a woman who has lost the beauty of youth, and tries to deceive the world by applying cosmetics, and even deadly poison, to cover up the irreparable loss.

Education in Rome soon degenerated to teaching sophistry, flattering speech, affectation in oratory, threshing of empty grammatical straw; in short, to artificiality in the worst comprehension of the term. Instruction was restricted to an interpretation of the classics. The method was mechanical; the discipline strict, harsh, and unfree. The golden era of Roman history was also the golden era of Roman education. The only portion of the Roman educational system which survived were the law-schools. They flourished even during the darkest period of Roman history, — a fact which explains itself.

THE ANCIENT GERMANS.

A CHAPTER FROM THE HISTORY OF CIVILIZATION AND EDUCATION.

When the Roman Empire began to unfold its greatest glory in conquests and politics, at the same time exhibiting the first signs of decay, we see the Germanic

tribes coming from the East and North, entering upon the historic stage. We see them wrestle for several centuries with the colossal empire, which had succeeded in subjecting almost the whole of the then known world, until at last the Roman giant succumbed and fell into fragments, upon which German tribes erected their thrones.

The Germans changed the map of Europe so completely, and proved themselves so invincible, so wonderfully powerful, that it is worth while to inquire into their mode of living, or, better, into their educational efforts. For we must never leave the fact out of sight, that the beneficial educational influence of a people, upon its own younger generations, is the main source of its national strength.

First, it may be stated what the fundamental differences were, between the ancient nations, and the Germanic races whose ideas revolutionized the world.

(*a*) The ancient Orientals had a despotic government, in which the individual counted for nothing. Look at the Tower of Babel, at the Pyramids of Egypt. Think of the millions of hands that were directed by a mere gesture of an all-powerful despot. Think of the mass-murder of men and children, and you will understand the saying: "The individual counted for nothing."

(*b*) Then we have the queer republican government of the classic nations, in which the state was towering high above all individual rights. All powers were derived from the state. The Roman was not an

individual man; he was a citizen first. Yes, Roman patriotism superseded the laws of humanity; the citizens of Rome were Romans always, right or wrong. They were Romans first, Romans last, Romans forever.

(*c*) When the Germanic tribes entered upon the stage of history, they brought with them the wonderful new idea, that a man was a human being first, then a citizen. They asserted that the human being had individual rights not depending upon the state. The state, they claimed, was, and never could be any thing else than, a combination of individuals for common protection and welfare. The unity in the state was the individual; and, his rights being inborn, they must be recognized even in the child.

Never has this idea had a more illustrious interpretation, than when, fifteen hundred years afterward, Jefferson framed it in these words: "We hold these truths to be self-evident: that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness; that to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and to institute a new government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness."

That declaration has a most refreshing fragrance,

and forms a marked contrast to the musty ideas of the ancients. And this idea of individual self-dependence, and independence from others, was born into the world at a time when the Germanic tribes began to invade the Roman Empire.

The declining nations, at the beginning of our era, were in despair. Their political convictions became confused, their religious foundations were violently shaken by the all-powerful new gospel of Christ, the man, yet Son of God. What was wanting, and what they sought, was individuality. The reader will please not shake his head at this sentence. There is more in it than appears at the first glance.

The individuality is conscious of its own needs, physically, mentally, and morally. A being who has no individuality, no self-dependence, no self-reliance, no character, of his own, but derives his strength, his value, his faith, his mode of thinking and acting, in fact, his very essence, from the state, from the caprice of a monarch, from a tyrant, from an autocrat, — I say, such a person loses himself, his individuality; his very fountain of strength dries up.

A new power had to come at the beginning of our era, — a flood of new humanity to sweep the corrupted state away, and create a new consciousness. And it came. The Germanic tribes swept over the ancient world, and brought with them a new idea, — the idea of individuality and individual independence. As sequences of this idea we find among the Germanic tribes, (1) respect for personality, (2) free acknowl-

edgment of the claims of woman, (3) loyalty to the leader chosen by themselves, (4) loyalty to friends, or the idea of fellowship. These features should be carefully noted, because from them arose the feudalism of the Middle Ages.

What Roman writers tell us of the education of the Germans expresses only the emancipation of individuality, which, in its immediate crudeness, had no other form in which to manifest itself than wars for conquest. To the Roman there was something demoniac in the German. He was not an obedient slave of a leader, but a man who stood for himself and his kin, a man who believed himself the descendant of a god. The Roman dimly perceived in him his future master. When the Romans were to meet the Cimbri and Teutons on the battle-field, their commanders had first to accustom them to the terrible sight of the wild, giant-like forms and fearless eyes of the Germans.

But again we see the all-powerful influence of civilization and culture. The Goths, those wonderful Germans who crushed the Roman Empire, and conquered Italy, were barbarians. When the hosts of Germans poured into the Roman Empire, they conquered it with little trouble, because its inhabitants were a degenerated race. And yet how much was to be learned from these effeminate people! religion, philosophy, literature, industry, art, and, curious enough, even warfare, — in short, every thing.

And the German hero sat down on the school-bench of his slave, and began to learn. And the slave made

use of this opportunity for revenge, and maliciously told his conqueror that his gods were devils, and his beloved heroes mean rowdies, with which decent people could not associate; for Hercules and Achilles, Joshua and Gideon, these were the right heroes. And if he did not tell him so to his face, the simple-minded barbarian felt something of the kind.

His heart was true, his strength invincible, his sense of justice uncorrupted, his language a wonderful source of everlasting rejuvenation, his whole being as different from the cowardly Roman as a demigod is different from a vile creature. Yet the refined culture of the ancients triumphed, and to-day no traces are left of the Goths, neither in Italy nor in Spain. As Grecian culture triumphed over the Romans, so Roman intellect triumphed over the Germans.

Education among the ancient Germans was in harmony with the character of the people, and with their political and religious institutions. The Germans were a people with a deeply rooted sense of freedom. True, this sense was, to a certain extent, egotistical. There were masters and servants; but even these serfs were not without certain rights, which no free-born man was likely to disregard. The free-born Germans had such a strong feeling of independence, that all their political institutions shaped themselves to give expression to this individual independence. "Help yourself," is not an American proverb, but it was a proverb when Herrmann slew the Roman legions in the Teutoburger Forest in the year 9 after Christ.

The proverb, "Self is man," became the ground law of communities and larger political divisions. Every single man's independence was religiously guarded; no one dared to interfere with his private affairs. Every village, every tribe, every combination of tribes, was independent and self-dependent in all matters pertaining to its own welfare. But in greater undertakings, — in war, for instance, — the Germans subordinated themselves readily to the leader, and with faithfulness they followed him to victory or death. This is the cause that we see an unruly obstinacy and assertion of independence in communities, and at the same time a fervent devotion and absolute obedience in following the leader as often as their sacred soil is in danger. The Romans had conquered all the then known nations, but they never conquered the Germans.

Among the chief virtues of the Germans were hospitality, and magnanimity toward friend and foe. The Germans fought their battles themselves; they never hired mercenaries. Cowardliness was unknown among them. The person of the free-born was sacred before the law; he could neither be corporally punished, nor sentenced to death.

Every hearth was an altar. "My house is my castle," said the Anglo-Saxon, also a German. Family life was sacred; and one of the laws peculiar to the Germanic tribes was that woman had the right to her own possessions, and to bequeath them at her free will. Children were a source of great pride and

happiness to the parents, and the more children there were in a family, the better; for with the number of children and relatives grew the influence and strength of the family.

The objects of educational efforts were to rear a race strong and healthy in body, brave and skilful in the use of weapons, mild-tempered, true-hearted, open-handed, charitable, faithful unto death, truth-loving, economical, and diligent.

New-born babes were dipped into water, and hardened against the influence of the weather. Though the climate of Germany is much the same as ours, children were left to play out-doors naked the greater part of the year. We can only understand this if we remember that all of Germany was then one great forest, only broken by small clearings along the water-courses. To the woods we may attribute the evenness and mildness of the climate.

When the boys grew up they went out hunting, or followed their father and relatives into war. Their most cherished play was the spear dance, in which the girls participated. In fact, in all their amusements, in all their educational efforts, both sexes participated. The mother was greatly respected, and a child who did not obey her implicitly and cheerfully was not known. The women vied with the men in size, strength, and skill in handling weapons. Riding, swimming, dancing, running, were practised equally by both sexes. It was one of the unwritten laws, that the man desirous of marrying must seek a woman

of equal age and strength. Of course Cupid not unfrequently broke this law.

Thus, then, were the Germans at the beginning of the Christian era. They had no schools. Especially gifted persons sought instruction among the priests. These had very original script-forms, — the so-called *Runen* cut into the bark of sticks. Very few could read and write. But there was one thing in which they were masters, and in which none of the ancients, not even the Greeks, could compete with them: I mean *music.*

It may be truly said that music was introduced first into Europe by the Germanic tribes, when they came in great swarms from Central Asia, from which place all the nations of Europe came. The history of German warriors was sung by bards; they kept alive the ancient traditions, and thus aided in educating the young. Everybody practised singing, yea, even their dances were sung by the surrounding crowds. Before a battle the Germans would sing in chorus to inspire themselves to heroic deeds.

AN INTERVIEW BETWEEN PESTALOZZI AND DR. BELL.

[*Translated from Pestalozziblätter.*]

PERHAPS it is not generally known that the inventor of monitorial teaching, Dr. Andrew Bell,[1] once visited

[1] Dr. Bell, when principal of a school at Madras, Hindostan (1795), became the founder of what is known in the history of education as monitorial teaching. He was afterward with Joseph Lancaster, in England, its most

Pestalozzi's institution at Yverdun. The biographical notes about Bell, which are found in Schmid's Pedagogical Cyclopædia, do not mention his journey on the Continent; nor is this journey mentioned by Hamel, Zschokke, and other authors who have written about the Bell-Lancaster method. Neither is this meeting mentioned in any of the numerous books on Pestalozzi's life and teachings. Luger merely mentions Bell as one of the visitors at Yverdun. W. H. Ackermann, one of the pupils of Pestalozzi, and subsequently teacher in the model school at Frankfort-on-the-Main, describes this visit of Bell very fully. The date is not accurately stated, but from the concluding passage of the description it may be inferred that it was in the year 1816, — the same year in which Pater Girard introduced monitorial instruction in Switzerland. The report of Ackermann, which has become exceedingly rare, is here reproduced as a contribution to the Pestalozzian literature. We quote: —

"Soon Dr. Bell followed us in our journey. He was desirous to make the acquaintance of the great competitor of his fame upon the field of education; and, practical as he was, he thought he might perhaps succeed in gathering up a few suggestions suitable to be utilized in his own system.

"Since he could neither speak German nor French, he asked me to be his interpreter with Pestalozzi. I

enthusiastic apostle. He died in 1832. The method is also known as the Bell-Lancaster method. Its main feature was, that the pupils of the higher grades taught those of the lower. Out of this has grown the present system of pupil-teachers in England.

consented cheerfully, since I hoped to find the best opportunity, perhaps not to convince him, but at least to furnish proof, of what I told him in England of Pestalozzi.

"Circumstances were favorable. A public examination was being conducted in the institution during the time of Bell's presence. I did not leave Bell's side, but remained with him, translating, explaining, calling his attention to every thing which I thought might be of interest to him. However, nothing seemed to please him; only when, at the close of the examination, military exercises were conducted, some expression of approval was heard from his lips.

"Since we thought he might perhaps not have had a proper opportunity to fully comprehend the real essence of the methods of instruction in the institution, because the instruction was as much as possible developing (heuristic), we brought some boys to him, and asked him to examine them himself. He demanded that they should solve the Pythagorean problem. One of the boys solved it, but Bell said his solution was not the right one; they taught another one in the English schools. The boy said he could prove it in another way; and the other boys replied that they, too, knew other solutions. I believe the boys themselves had found more than twelve different solutions of this geometrical problem. We induced the boys to furnish some of them, in order to see whether the English one was among them. However,

Bell continued to shake his head: the one taught in the English schools, he said, was the best.

"Thus it seemed impossible to give to the great pedagogue, who seemed boxed up in his own system, as much as an idea of the truth, that, instead of giving his pupils an immense number of receipts, it was immeasurably better to develop their thinking power and power of application, so that in different circumstances in life they might be enabled to help themselves; in other words, to write their own receipts.

"For the following day a second meeting was arranged, in which Pestalozzi and Bell were expected to exchange their ideas of public education, and in which Bell desired to illustrate his system practically. All the teachers present in the castle, all the strangers and notables in the city, flocked together to hear this noteworthy discussion, which, it was hoped, would not be without important results. For there would stand face to face the two most noted and dissimilar schoolmen of their time, — two schoolmasters of world renown, as diametrically opposed to each other in their principles as well as in their finances. The one had become poor more than once in the attempt to realize his ideals for the benefit of mankind: the other had received for similar labor, for the advancement of the English High Church, an annual salary of two thousand pounds (other biographers say four thousand pounds).

"Pestalozzi began to unfold his principles with all the ingenuity at his disposal, with all the lucidity which

translation into a foreign language would permit. But this did not have any better result with Dr. Bell than the one mentioned before. Pestalozzi, for instance, spoke of exciting the activity of children, and among other things said that he would make very little, if any, use of ambition as a motive power, because that was very frequently too powerful and too easily over-excited. He would use purer motives; as, for instance, love for duty, parents, teachers, and, above all things, interest in the subject matter. This latter, he suggested, should be gained by methods of teaching suitable to the pupil's individuality. Pestalozzi became quite eloquent on this subject. But the old answer came again: all that was very nice, but he, Bell, went further, because this powerful lever, ambition, or 'this powerful engine' as he termed it, was the very foundation upon which his system rested.

"This he proceeded to show practically. Pestalozzi withdrew to his sofa, and the gentlemen present were placed upon the three sides of a square drawn with chalk on the floor; on the fourth side Bell stood himself, with his interpreter.

"And now began a most ridiculous contention about trifles, and about a number of unessential things; as, for instance, when some one stopped in reading, or did not hold his book straight, or let it fall, or did not stand straight, or in moving up or down in the line walked in front of instead of behind the others, — then the master would show himself in his glory. In a similar manner arithmetic, and even religion, — that

is, the catechism, — were treated in the dryest and most mechanical manner. For instance, 'God created the world. Who created the world? what did God create?' etc., *ad nauseam.*

"I turned around to Pestalozzi, curious to see how he was impressed with this kind of teaching. He lay on the sofa, and chewed the end of his necktie, as he was wont to do when he had one on, which was only on festive occasions. Whether he did it now from pleasure or disgust with what he saw and heard, I am unable to say; for he remained ominously silent.

"Next day Bell departed for Freiburg, in order to visit the flourishing educational institutions founded by Pater Girard, who was afterwards removed by the Jesuits. I accompanied him. Before Bell left Freiburg, he took me aside, saying, 'Well, now I have seen the method of your Pestalozzi. Believe me, in twelve years from now nobody will speak of it; but mine will have spread all over the globe. Come back with me to England. You will make your fortune. With Pestalozzi's maxims and mode of teaching you will never succeed.'"

It is now seventy years since Bell predicted this; and who knows any thing of Bell now? and who believes in the efficacy of his method?

PRUSSIAN SCHOOLS SEVENTY YEARS AGO.

When Gust. Fr. Dinter became superintendent of the schools of Eastern Prussia (his office was at Königsberg on the Baltic), he found the schools in a

deplorable condition; and with true insight into what is needed most in effecting an improvement of the schools, namely better teachers, he set out to work that memorable cure which has become a matter of history, and the effects of which are noticeable even to this day. He tells almost incredible things to illustrate the low standard of the teachers of his province.

One of these teachers believed that the Daughter of Zion had been a young woman of rather questionable repute, living somewhere about the palace of Solomon. Another, who had to teach "religion" (as German teachers in public schools do even now), told his pupils that the Kapernaum River emptied into Lake Genezareth. A third claimed that there were wild sheep in the woods of Prussia, commonly called deer. A fourth cared naught for the contradiction of his advanced pupils when he claimed it possible to slaughter seven and one-half sheep, or drive that many to pasture. A fifth made sixteen mistakes in spelling in four lines. A sixth, a discharged specimen, complained in a petition to the king that the township Wandlaken had defrauded him of 200,570 dollars. Dinter was commissioned to investigate the case. First he thought the man crazy; but he soon discovered that the man had just cause for complaint, that he, however, really only claimed 275 dollars due him. The man wrote 200 and 5 and 70 thus: 200,570.

In Memel, Dinter inspected a school one day, and found that the pupils were remarkably swift in solving problems in mental arithmetic; indeed, so rapidly did

one answer follow the other, that his suspicion was aroused. He stepped nearer the platform, and noticed that a boy raised his hand before a question was given out. Dinter asked, "Why do you raise your hand before you know the question?"—"Oh, I know what's coming," said the boy innocently. "I am glad to make your acquaintance," said Dinter, turning to the teacher. "There is evidently method in this madness." In a large class of girls Dinter found not a single pupil who felt it impossible to draw a four-cornered circle. In another a pupil gave it as his opinion that Jesus' chief occupation had been to conduct other people's lawsuits.

One day he spent some time in a school where he observed a wholesale slaughter of innocent minds by mechanical drill and dead routine. Yet, despite the stultifying procedure, he found a few bright pupils who seemed to make progress, not *because* they were thus taught, but *despite* it. When the teacher accompanied Dinter to the gate, the latter turned and said he had made a delightful discovery in his school. Of course the teacher expected to hear a compliment, and said smiling, "May I ask what it is?" Dinter's answer was, "I have observed that human reason has a remarkably tough life: you do all in your power to knock common-sense on the head with a club, but it seems to live on in spite of that."

One day Dinter took dinner at a hotel-table, and was much annoyed by an aristocratic land-owner who seemed bent upon forcing his narrow views upon

modest Mr. Dinter. Said he, "Mr. Inspector, you are acting contrary to God's intentions, and the welfare of the country, by trying to elevate the common people to a higher level of existence. God, Nature, and the Government have destined them to perform purely mechanical drudgery. If you teach them to think, you revolutionize the world, and sin against the dictates of common prudence as well as divine law." Dinter did not feel like philosophizing with this narrow mind while he carved his steak, and therefore only said, "We will discuss that afterward. Let us talk about stock-raising. You have only recently bought that extensive farm, but you seem to have learned a good deal of live stock already." — "How do you know that?" asked the farmer. "Why," said Dinter with a cunning smile, "you seem to know already, that, to make a bull a good beast of draught, he must be castrated." Tableau.

REFORMERS AND PROMOTERS OF EDUCATION DURING THE CHRISTIAN ERA.

42–100 A.D. — *M. Fabius Quintilianus* of Spain; in Rome from 69 A.D. Lawyer, educator of emperors and princes; public teacher of oratory. Was the first teacher who received a salary from the State. His twelve books upon rhetoric contain numerous wise sayings with reference to the education of the young.

330–378. — *Basilius the Great*, bishop of Cæsarea in Cappadocia, Asia Minor. Made educational practice a duty of monks.

About 470. — *Marcianus Felix Capella* in Africa, author of "Satyricon," which remained a text-book of the seven arts for more than one hundred years.

470–563. — *Magnus Aurelius Cassiodorus* in Ravenna, Italy, chancellor of the Gothic kingdom in Italy; later, a monk. With Boetius, the founder of the so-called scholastic method. His book upon the various branches of study remained a text-book all through the Middle Ages. Historian of the Goths.

475–524. — *Boetius* in Rome, author of many school-books, also of "Consolation of Philosophy." A fine psychologist.

719–799. — *Sturm* in Bavaria, a favorite of Bishop Bonifacius. Founder of the famous convent school at Fulda, which contributed more toward spreading Christianity in Europe than any other school.

735–804. — *Alcuin* in York, first rector of a school in England; afterward called to the court of Charlemagne, where he became rector of the noted "*Schola Palatina*." Introduced instruction in the classic languages in Western Europe.

776–856. — *Rhabanus Maurus*, rector at Fulda, is called the first teacher of Germany. Boys' school separated from the convent. His principle, "individual instruction."

806–849. — *Walafried Strabo*, abbot of the convent at Reichenau, in Lake Constance, Switzerland. His journal, the most important source of information regarding education of his time. A famous teacher and much-quoted author.

810–890. — *Joh. Scotus Erigena*, rector of the above-mentioned "*Schola Palatina*," renewed the fame of this school under the reign of Charles the Bald.

1097–1141. — *Hugo of St. Victor*, in Paris; author of "Didascalium" (text-book), used extensively.

1206–1264. — *Vincent of Beauvois*, a French Dominican monk. Author of a famous book on the education of princes and nobles; also of the "Mirror," a philosophical treatise.

1340–1384. — *Gerhard Groote*, monk in Deventer, Holland, made it the duty of his order to establish schools, and take care of the poor. Improved method of teaching Latin.

1407–1458. — *Maphœus Vegius* of Lodi, Italy, worked in Rome. Author of six books on the education of children, the greatest work on education ever written in Italy.

1443–1485. — *Johannes Agricola* (*Hausmann*) in Holland, noted teacher in Heidelberg and Worms. Prepared many teachers of great renown.

1467–1536. — *Desiderius Erasmus* of Rotterdam, lived in Basle, Switzerland. Great influence upon methods of education; published "Adagio" and "Colloquia," also "Methods of Study," all noted educational works.

1483–1546. — *Martin Luther*, born at Eisleben, Thuringia; professor in the University of Wittenberg; reformer of the Church; founder of common schools for both sexes; translator of the Bible into New High German; wrote a catechism, a primer, and was very

influential in awakening a desire for education among the people.

1484–1531. — *Ulrich Zwingli*, one of the reformers of the Church; founded common schools, and wrote a treatise on education of boys.

1485–1558. — *Johann Bugenhagen*, introduced the common school in Northern Germany.

1490–1556. — *Valentin Friedland Trotzendorf*, rector of the famous model school at Goldberg.

1497–1560. — *Philipp Melanchthon*, Bretten in Baden, one of the reformers of the Church, called "*Præceptor Germaniæ;*" reviver of philology; author of renowned text-books.

1499–1582. — *Thomas Platter* (*Wallis*) in Switzerland, rector at Basle. His autobiography is the chief source of information concerning the education of his time.

1503–1558. — *Jacob Micyllus*, Frankfort-on-the Main, worked at Heidelberg; noted pupil of Melanchthon; laid stress upon understanding the classical writers, — that is, the substance rather than the language.

1507–1589. — *John Sturm*, rector at Strasburg; the most noted and independent practical educator of his time; taught the idea that the classical studies should be pursued for the sake and benefit of religion, claiming that they had value in themselves; is still quoted when the formal aid of education is defended.

1515–1572. — *Petrus Ramus*, France; reformer of French schools; insisted upon general culture in contradistinction to mere language instruction.

1516–1580. — *Hieronymus Wolf*, rector at Augsburg. Principle: "School has accomplished all it can do, if it succeeds in teaching its pupils to educate themselves."

1533–1592. — *Michel de Montaigne*, French author; of great influence in giving education better aims: (1) body and soul to be harmoniously developed; (2) in mental discipline, practice should be more prominent than memory work.

1571–1635. — *Wolfgang Ratich(ius)*, born in Koethen, Thuringia, Germany. Called the founder of "the new method;" not mechanical drill, but development and practice of the thinking faculty. Friend of Baco de Verulam, whose revolutionary ideas he embodied in a memorial addressed to all the princes of Germany. Introduced instruction in German into the higher schools of Germany side by side with Latin. The first who emphatically claimed teaching to be an art.

1586–1654. — *Joh. Valentin Andrae.* Reformer of schools in Wurtemberg, Germany. Claimed that the mother-tongue should predominate over Latin, and that it should be taught rationally.

1592–1671. — *Joh. Amos Comenius*, born at Comnia, Moravia. Bishop of the Church of the Brethren at Lissa, Poland. Father of modern educational science based upon psychological principles. "*Nihil est in intellectu quod non fuerit in sensu.*" Author of "Orbis Pictus." Education has the purpose of making the human being happy by harmonious mental and moral development.

1600–1669. — *Joh. Michel Moscherosch.* Emphasized Christian home training.

1610–1661. — *Joh. Balthasar Schuppius*, Hamburg, Germany. Promoter of popular education.

1635–1705. — *Philipp Jacob Spener*, Germany. Reviver of true Christian spirit in school; introduced better methods for religious instruction; opposed orthodoxy.

1651–1715. — *Fénelon, François de Salignac de la Mothe.* Archbishop of Cambray, France; tutor of Louis XIV.'s grandchildren. Author of the well-known juvenile book, "The Adventures of Télémaque."

1655–1728. — *Christopher Thomas(ius)* at Halle, Germany. Advocated the use of the mother-tongue in instruction in science. Noted advocate of freedom of thought.

1661–1731. — *Daniel Defoe*, England. Worked in favor of rational education by writing the immortal children's book, "Robinson Crusoe" (1719); advocated, also, religious liberty.

1661–1741. — *Charles Rollin.* Distinguished French educational author.

1662–1742. — *Richard Bentley*, England. Most distinguished promoter of modern science of archæology.

1663–1727. — *Aug. Herm. Francke*, Halle, Germany. Founder of orphan-asylum and extensive schools for the poor. One of the most noted exponents of Christian charity.

1669–1740. — *Christopher Semler*, Halle, Germany. Founder of the first scientific high school (so-called *Realschule*).

1693–1735. — *Joh. Jacob Rambach*, in Jena and Giessen. The first German professor of pedagogy.

1707 – 1781. — *Joh. Aug. Ernesti*, in Leipzig. One of the most noted and successful schoolmasters of his time. "Humanism (as combination of classical and scientific studies) to be the foundation of high-school instruction."

1712–1778. — *Jean Jacques Rousseau*, of Geneva. Depicted in his "Émile" (1757) the ideal of an education based upon pure reason, presupposing impossible "natural conditions" and aiming at "naturalism." Complete denial of pedagogic principles and traditions of the past. Rousseau's influence cannot be traced to have been directly beneficial; but the thoughts he awakened, and the actions to which he spurred others, will place him in the foreground of the history of education.

1713–1797. — *Joh. Fr. Flattich*, in Wurtemberg, Germany. A most original educator, of Christian spirit; aimed at bringing out the individuality of the child; discipline the essence of education.

1723–1790. — *Joh. Bernhard Basedow*, Dessau, Thuringia, Germany. Founder of the "Philanthropinism." His principle was, that school must aim at a general human development, bring out what is human in man. Chiefly acted from the standpoint of utilitarianism. What Dr. Bell was in England, Basedow may be said to have been in Germany; to wit, a representative of educational charlatanism.

1724–1788. — *Joh. Ignaz von Felbiger*, the founder of Catholic people's schools in Austria.

1724–1793. *A. Fr. Buesching*, in Berlin. Educational author, and founder of geographical instruction.

1725–1806. *Fr. Gabriel Resewitz*, Germany. Emphasized the necessity of establishing special schools for the practical preparation of tradesmen and farmers.

1726–1804. *Chr. Felix Weisse*, Germany. Noted writer of juvenile literature, such as "The Children's Friend."

1729–1790. *Samuel Heinike*, Hamburg and Leipzig, Germany. Inventor of a method of teaching deaf-mutes to speak.

1729–1812. *Christ. Gottlieb Heyne*, in Göttingen, Germany. The greatest philologist of his time. Teacher of numerous noted schoolmen.

1734–1805. *Fr. Eberhard von Rochow*, Germany. Reformer of rural schools.

1735–1811. *Robert Raikes*, England. Founder of schools for the lowest strata of society; particularly noted for establishing Sunday schools.

1744–1811. *Christ. Gotthilf Salzmann*, Germany. Founder of the world-renowned educational institution at Schnepfenthal, in which the purified principles of Rousseau and Basedow were applied. Fertile author.

1745–1818. *Ernst Christ. Trapp*, Germany. With Salzmann and Campe, chief advocate of purified philanthropinism.

1745–1822. *Valentin Hauy*, France. Established the first asylum and school for the blind in Paris, 1784.

1746–1818. *Joachim Heinrich Campe*, Germany.

Noted author of juvenile literature. "Robinson Crusoe the Younger."

1746–1827. *Joh. Heinrich Pestalozzi*, Switzerland. Originator of modern pedagogical art, especially in regard to elementary instruction. Principles: instruction must be based upon sense-perception, must proceed step by step from the known to the unknown, from the near to the remote, etc. Aim of education should be to develop pure humanity upon a Christian basis. A wonderful enthusiast and idealist, but impractical to a fault.

1746–1830. *Stephanie von Genlis*, the most distinguished lady teacher and pedagogical writer of her time in France.

1753–1832. *Andrew Bell*, England. Promoter of popular education. Inventor of monitorial teaching (employment of pupil teachers). (See also Lancaster.)

1754–1828. *Aug. Herm. Niemeyer*, Halle, Germany. Influential educator and pedagogical writer. Principle: education should be rational, and develop what is human in man.

1759–1839. *Christ. Fr. Guts-Muths*, Germany. Teacher at Schnepfenthal; improved methods of teaching scientific studies; zealous promoter of gymnastics.

1760–1831. *Gust. Fr. Dinter*, Germany. Highly influential in improving normal training-schools. Did much to lift the common schools of Eastern Prussia when school inspector at Königsberg. Disciple of Pestalozzi.

1761–1850. *Heinrich Stephani*, Germany. Reformer of the school system of Bavaria according to Pestalozzian principles; re-invented the "lost art" of teaching to read by sounds instead of by the alphabet method.

1763–1834. *Karl David Ilgen*, Germany. The "prince among rectors;" fertile writer, and great authority.

1766–1837. *Fr. H. Christ. Schwarz*, Germany. Professor in Heidelberg; noted teacher; promoter of Pestalozzi's and Kant's ideas; author of a much-quoted "Manual for Education and Instruction."

1766–1841. *Joh. Baptist Graser*, Germany. School inspector at Bayreuth, Bavaria. Aim of education should not be a development of what is human in man, but of the ability to fulfil divine destiny.

1766–1848. *Fr. Immanuel Niethammer*, Germany. Chief school inspector at Munich; represented the idea of humanism as opposed to the idea of utility urged by the philanthropists.

1768–1826. *Johann Falk*, Germany, Dantzig. Founder of the first German boys' reform school at Weimar and similar institutions.

1768–1854. *Christ. von Schmid*, Germany, Augsburg. Distinguished author of juvenile reading matter.

1769–1831. *James Hamilton*, England. Inventor and advocate of the so-called analytic method in language instruction.

1770–1840. *Jean Jacotot*, France, Paris. Inventor

of a method known as Jacotot's method, which aims at the greatest possible self-activity on the part of the pupil, and exercises the memory by endless repetition. Principle: "All is in all." Starting with a fable, he combined every kind of instruction with language, and thus concentrated all his efforts upon a common centre.

1771–1844. *Phil. Emanuel von Fellenberg*, Switzerland. Founder of the first industrial school. His institution at Hofwyl gained great renown.

1771–1858. *Robert Owen*, Scotland. The socialist. Founded, 1816, at New Lanark in Scotland, the first infant school.

1773–1838. *Bernhard von Denzel*, Germany. Noted for his laudable efforts in behalf of the school systems of Nassau and Würtemberg.

1776–1839. *Henric Ling*, Sweden, Lund. Founder of the so-called Swedish system of gymnastics.

1776–1841. *Joh. Fr. Herbart*, Germany. His philosophical and psychological writings have exercised a great and beneficial influence upon pedagogy. Applied his ideas practically as principal of a teacher's training-school.

1777–1838. *Jos. Lancaster*, England, London. Founder of the so-called Lancaster schools, in which Bell's suggestion to have the younger pupils taught by older ones, was carried out. This "monitorial teaching" is commonly called Bell-Lancaster method.

1778–1852. *Fr. Ludwig Jahn*, Germany. Father of gymnastics in Germany.

1779–1868. *Henry Brougham*, England. Noted

promoter of education among the lower strata of society.

1780–1852. *Karl Christ. Gottl. Zerrener*, Germany, Magdeburg. Reformer of public-school system in Prussia, and authority on methods. Author of "Book of Methods."

1782–1852. *Fr. Wm. Aug. Froebel*, Germany. The greatest modern reformer of education. Noted author: "Education of Man," "Pedagogy of the Kindergarten," and other works. Best known as the founder of kindergarten.

1787–1864. *Wilhelm Harnisch*, rector of a teachers' seminary, Weissenfels, Germany. Noted authority on methods, and author of text-books used quite extensively.

1790–1866. *Fr. Adolf Diesterweg*, Moers in Rhenish Prussia, later in Berlin. Rector of teachers' seminary. Most decisive promoter of rational teaching; author of "Teachers' Guide," which, repeatedly revised, is to this day the standard work on practical pedagogy in Germany. He was in Germany what Horace Mann was in America: the sharpest critic, the most fertile author, and the palladine of the profession. In the press, on the rostrum, in Parliament, he always fought the battle of the teachers against conservatism, priestly arrogance, and the stupidity of the masses. If the four greatest pedagogues are to be mentioned, they must be Comenius, Pestalozzi, Froebel, and Diesterweg.

1791–1864. *Christ. Gottlob Scholz*, Germany.

Principal of a normal school for female teachers at Breslau.

1795–1842. *Thomas Arnold*, England. Rector at Rugby; reformer of secondary instruction; one of the greatest educators of England.

1798–1862. *Joh. Karl Christ. Vogel*, Germany. Distinguished rector of the "Real-school" at Leipzig.

1798–1854. *Fr. Eduard Beneke*, Germany. Noted psychologist at Berlin. Very influential by applying psychological laws in instruction.

1799–1868. *Johann Gottl. Dressler*, Germany. Rector of a normal school at Bautzen; very active in spreading Beneke's ideas.

1800–1879. *Heinrich Wichern*, Germany. Founder of the reformatory school "*zum Rauhen Hause*" at Hamburg.

1801–1870. *Th. Ignatius Scherr*, Switzerland. Distinguished promoter of popular education in Switzerland.

1802–1868. *Heinrich Graefe*, Germany. Rector of Real-school at Bremen. Emphasized the training of emotions, in contradistinction to the one-sided intellectual training.

1803–1873. *Thomas Guthrie*, England. Founder of the so-called "Rag-school" for depraved youth.

1804–1875. *Karl Adolf Schmid*, Germany, Stuttgart. Editor of the greatest cyclopædia of education and instruction, a wonderful work, and the best source of information for the history of education.

1804–1873. *August Lueben*, Germany. Pupil of

Harnisch; rector of normal school at Bremen, reformer of methods in teaching natural history and sciences, author of a number of well-reputed school-books, and editor of an educational journal, "The Practical Schoolmaster."

1810–1858. *Karl Mager*, Germany. Promoter of modern "Citizen-schools."

1811–1867. *Friedrich Luebker*, Germany. Rector in Schleswig. Author of an excellent lexicon of classical antiquity.

1816–. *Ferdinand Schmidt*, Germany. Author of juvenile literature.

1817–. *Tuisko Ziller*, Germany. University of Leipzig. Represented Herbart's principles; founded a normal school for university students, in which he applied Herbart's system of concentric instruction. Same was done in Stoy's seminary at Jena.

1819–1864. *Karl Schmidt*, Germany, Gotha. Author of best history of education; advocated anthropological instruction.

1829–. *Friedrich Dittes*, Austria. Rector of normal school at Vienna. Best authority on modern methods of teaching; well-reputed editor of educational journals; and author of "School of Pedagogy," 4 vols.

The writer has purposely omitted all reference to American educators, since he considers himself incompetent to make a proper selection from the long list of distinguished educators who have so nobly worked

to promote American popular education to its present high standard of excellence. But he hopes sincerely that some well-reputed, judicious writer may find it a labor of love to furnish the American teaching profession with such a list.

CHAPTER X.

HISTORY.

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WHY, WHEN, AND HOW TO TEACH HISTORY; OR, A WANT, AND HOW TO MEET IT.

It is a trite, yet eminently wise, remark, "The boy is the father of the man." The man is to be, certainly in this country, the citizen of a Republic. It seems, therefore, very desirable that the boy, and for that matter the girl also, should acquire something of that which is indispensable in the future citizen. The citizen of a republic is distinguished from the subject of a monarch by a greater number of rights; but every additional right is, according to "the eternal fitness of things," balanced by an additional civil or moral duty. The citizen of the Republic is, therefore, under greater obligations than the subject of a monarch.

I do not care to encumber this essay with an enumeration of these rights and duties. I will mention only one, which, though self-evident as it may be, is not generally understood. Self-government demands greater exertion on the part of the individual in all domains of human activity; but, above all, it demands a higher degree of intellectual and moral culture, both for the enjoyment of greater rights and the fulfilment of higher duties, than is required of persons in a

country with little or no self-government. This reasoning appears to me so evident, that I hesitate to give it utterance.

But let me ask, Is it generally acknowledged to be correct? Do educational officials, leaders of educational affairs, act accordingly? It appears not. With much complacency and satisfaction it is said, — and not only in Fourth-of-July orations, — "Every citizen of this glorious country is a sovereign." This savors much of the proverbial "*Civis Romanum sum*," and will inevitably lead to the same result; that is, degeneration of the individual and state.

It is the common belief in all strata of society, that the mere privilege of being a citizen — the accident of birth — is sufficient for all practical purposes. An extensive preparation does not seem to be required or needed. Indeed, the fact that a colored — or, for that matter, a pale-faced — illiterate voter, whose want of culture stamps him an "encyclopædian ignoramus," has greater rights and fewer duties than the most accomplished and cultured lady, is evidently the upshot of the general belief referred to. We trust too much to the "benign influence of our free institutions."

We sin grievously, when we hasten to acquaint our children with the rights of citizenship, but remain silent upon their attendant duties. Under such circumstances the rights of an ignorant, vicious person, or of a weak, reed-like character, are rights no longer: they are privileges (private rights).

But not only in intellectual culture should the citizen of a republic excel. More necessary than that, is moral or ethical culture. Nowhere is the noble virtue obedience a more necessary requisite of citizenship than in a republic, where no arbitrary power enforces obedience, but where the law is made and executed by the people themselves; where the government is "of the people, by the people, and for the people." Without strict obedience of its citizens, the republic is a contradiction in itself.

Obedience is, to a great extent, dependent upon the will-power, and that can only be trained in early youth. Every one who has had experience in training children knows this; but when we come to ask, How is the will-power best to be trained? the most contradictory answers will be heard. I do not care to stoop so low as to refute the rod-argument or the taffy-argument. Let me say at once, that *moral will-power must derive its nourishment from the fountain of emotion.*

The moral will-power can be steeled in no more rational and no more appropriate way, than by means of good instruction in *history.* In history lie stored up the grand examples and experiences of the past. Youth is willing, nay, eager to learn them, if they are brought to them, not as mould and ashes, but as living creatures and lifelike actions. And with the aid of history alone can be proven the grand truth, that the system of the world is not dependent upon mere senseless play of mechanical forces, in which accidents or cunning or brutal force play the important *rôles*, but

upon an immortal law of justice and truth; and that he is the mightiest and happiest who succeeds in keeping his own life in constant harmony with these fundamental laws of the entire system of the world.

"Man meets, both in the ethical and physical world, a number of definite laws and regulations. If he does not heed them, he injures himself, he inevitably incurs punishment; for these laws (as we may term them) are so wonderfully constituted and adjusted, that they execute themselves. Punishment for this violation need not be inflicted laboriously and arbitrarily by external agencies, but follows with necessity as an inevitable sequence. Like rocks in the sea, amid the roaring waves of human existence, these eternal ethical laws stand unshaken; and however often the billows attempt to wash them away, surging up to them, and momentarily covering them, the billows always recede discouraged, and the rocks appear anew, brighter, and, to all outward appearances, more firmly set than ever."

These words of a noted Swiss writer (Bitzius, jun.) seem to indicate clearly what must be the true object of instruction in history. The true object of all education, in fact, seems to consist in making the human being see clearly the existence of this ethical order of the world, which is subject to unchangeable laws, and can be observed in great things as well as in trifles. History will be the most effectual means for that purpose. Education must also bring to a clear conception the greater value of ideal gifts, and their preferableness to material ones in all conditions of

life. From this will, by the aid of life's experience, result that which is crystallized in the one word "character." Again, history is the most effectual means to that end.

The rising generation must get historical knowledge, if not for these reasons, then certainly for the purpose of preserving the Republic, and perpetuating its free institutions. The future can be read between the lines of the records of the past. History unfolds before our eyes a picture of what past generations thought, aspired, and accomplished. History shows us our own errors; and these are all the more readily seen, since it offers us a standard of measurement in the errors of other nations.

History affords, without artificial preparation, an insight into human affairs, characters, aspirations, and destinies, particularly in their combinations, as they appear in the affairs of the state. It gives knowledge of man, creates ethical judgment, promotes political education. A study of history fits our children for a place in the world better than any "bread-and-butter study" will.

History has a just claim to a place in the curriculum of the common school in *this* country, where participation in public life, and the business of state, is not confined to officers of the state, but where every citizen, by means of his one modest vote, decides the destiny of his country.

History is a relative term. Many give it no wider meaning than a narration of events that happened in

this country since 1776. This is to be regretted. It is my humble opinion, that the pupils should learn more history than that of the United States, although that much is more than millions of them ever learn. Mirroring one's self in one's own accomplishments, and measuring one's self by one's own deeds, will cause that fatal kind of insanity, called hallucination of grandeur, specimens of which can be noticed in all strata of society; it is even found in entire nations, notably in the French. People who learn no other history than that of their own country lose the best and most significant part of history. They have no standard of measurement, and settle back into a feeling of complacency and satisfaction which is the arch foe of progress.

The boy who claimed that Washington was the first man, and upon being reminded of Adam, said, "Oh, well, if you count foreigners in," — that boy is not an imaginary creation. We may find him in all classes of society, and in every part of the Union, but most frequently in New England.

The poet was right who said, "In small circles the mind remains small." The wider the horizon of observation and thought, the greater the intelligence. Notice the similarity between physiology and psychology. Hunters who search the distance have a far vision: bookworms are near-sighted. Church-tower patriotism is on the increase in this country.

New York's "finest police in the world," Kalamazoo's "finest schoolhouse in the world," and like

expressions, are all grown on the same soil, — over-estimation of self, want of a standard of measurement. Let the future citizen of the Republic study the history of Greece, Rome, France, Germany, and England; let him compare these countries with his own. He will appreciate his own nation's noble deeds the better, and judge its evil tendencies the more justly, the more he learns of the achievements and errors of other nations.

How little this self-evident truth is understood by school-men, may be seen from the fact, that of late the study of history is recommended to be replaced by trigonometry, "because the latter has a market value." It can be seen also from school statistics. In them is found documentary evidence to the startling fact, that general history is not taught, except to some fortunate few.

The Commissioner of Common Schools of Ohio states that the number of pupils enrolled in the common schools of the State in 1884 was 762,755; that of these not ten per cent studied United-States history, namely 69,985. And the number of those who studied general history was so insignificant, that he saved the State some humiliation by not mentioning the paltry few hundred who attempted to get a glimpse at ancient Greece and Rome.

Educational considerations, then, and the future of this Republic, our country, demand that the young generation be made acquainted with history. The nature of the study itself demands that history be taken up at an early age, say at twelve years, or even

earlier. In higher seats of learning little can be remedied, if the student does not bring with him that comprehension of national history and political institutions which alone will make the further study of history profitable. The study of geography, it is said, must be based upon a solid foundation of sense-perception. This maxim holds good in the study of history: a comprehension of historical actions and their motives cannot be gained, unless it be based upon a lucid understanding of institutions and events of the day. The maxim, "From the near to the remote," is applicable in the teaching of history, as well as in other branches of study.

But there is another reason why the study of history should begin early, and be guided well. It is this: the student comes to the high school or college with the firmly laid substructure of his entire being. He comes bent upon either ideal or material purposes. His aspirations have a certain direction. His habits are formed. His inclination for doing work, or for shirking it, is developed. In numerous cases he has accustomed himself to a given method of acquiring knowledge, which cannot be changed. He is even endowed with predilections which no professor of history would find possible to counteract. To leave, therefore, the most important branch of study for the upbuilding of character to those few fortunate ones who enter secondary schools, is, to term it mildly, very unwise.

It is scarcely necessary to reiterate, that but few

ever complete the course of study in secondary schools, and that the number of boys who enter secondary common schools is insignificant when compared with that of the girls. It is a standing reproach to our system of schools, when we hear that in monarchical Germany general history is taught below the high school.

Now, *how history should be taught*, and *by whom*, are by no means indifferent questions. The pupil must, first of all, feel some of that fire of enthusiasm, of that warmth of conviction and ideality which glows in the breast of the teacher. Then he will awaken, then he will begin to work for himself, with himself, and upon himself.

Without this awakening, without this self-activity, all work in schools is in vain, mechanical, and unprofitable. Deep interest in the subject, and faith in the person of the teacher, — yes, faith pure and simple, — are the most powerful levers in all school-work, but in no other study are they more directly felt than in history. With this I have mentioned the most important factor, — *the teacher*.

History is by no means something which any amateur may read up to-day, and teach to-morrow. It is a conception formed of many perceptions; it is, aphoristically speaking, an inner experience which must have become the teacher's own, and of which he can speak as readily and vividly as of an experience of every-day life.

A true teacher of history can speak of the Punic wars with as much authority and decision as he can

relate events which happened to himself only yesterday.

If he can do that, he will teach history usefully, with reference to the present time, and not too usefully in the sense in which it becomes unhistorical; that is to say, not so that the comprehension of the spirit of times and men is lost, and all is saturated with cant, and colored with predilections of the teacher. It is a grand thing to be a teacher of history!

In no country is history taught less than in America, and in no country are more laws made and broken than here. The former is the cause; the latter, the effect.

Nowhere are theory and method wanting nowadays, especially not in the affairs of the state. The machinery of the state works more lively than at the time of the Declaration of Independence, though that period was exceedingly rich in action. The political documents of that glorious period of American history, from 1775 to 1789, fill no more space than do the proceedings of one uneventful session of Congress nowadays. But the papers written by the founders of the Union all bear the unmistakable stamp of greatness, and show indelible traces of the life and actions of a greater race than ours, — greater in philosophic insight, greater in purity of motives, greater in deeds and aspirations. To rear a generation like the one that laid the firm foundation of this remarkable structure, the United States of America, must be our object, or we could not be worthy to live under its protection.

Dr. Hilty of Bern says, in a most excellent essay on instruction in history, "Above all, it seems to me, *history should be seen*, and not merely memorized. It should not consist in mere names and dates, nor in bombastic glittering generalities, nor yet in dry synoptical enumeration of events. That has been our fate under the hands of an amateur in history-teaching. He gave us his home-made synopsis, and required of us to learn by heart from a text-book of general history, which was, like all text-books of history, superficial to a fault."

It must be the object of the teacher of history to make the matter of instruction *objective*, so that it may become nourishment for the imagination of the pupil. The teacher should make use of all possible auxiliaries, such as geographical maps, artistic representations of things and events. He should consult and make frequent use of standard works on special history, and induce his pupils to refer to them. But let him shun the "terrible temptations" of overloading the memory of his pupils with indigestible dates and names, which will soon be forgotten, and only have the fatal effect of weakening the memory. Pupils who have merely memorized history will not be able to recall historical events and personages with accuracy: they will invariably "kill the wrong man, at the wrong time, in the wrong place, and for the wrong reason."

The greater number of educated persons can, shortly after leaving school, recall but very few of the things they learned by no other agency than the

printed page and the memory. And as to dates, I dare say, none remain inalienable property of the learner, which he can at any time command or turn to account. How few pupils obtain a tolerably correct idea of the Greek and Roman world, or of German, French, and English life during the Middle Ages! It is a lamentable fact, that no period of history is ever presented in its totality in schools, so as to afford a bird's-eye view. If the reader be incredulous, let him, in the company of friends and educated persons, propose such questions as these: —

What was the general state of affairs in Europe during the fifteenth century? Who was Pope then? Who were the great potentates then? What were the general boundaries of France, Italy, and Germany? What remarkable events happened during that time? In what state or condition was law, art, education, religion, or industry and commerce?

Or take any other century.

The reader will soon find how vague are the ideas upon historical facts among his friends, and how little the faculty of transferring one's thoughts back into remote periods of history is developed. How can it be, when the pupils in school are fed with detached facts and names which appear to them in no other connection than that they follow each other chronologically? The pupils are not made to see the *causal nexus* between the histories of different nations. Historical conceptions which are vividly imprinted upon the memory, and influence the mind and character of the

young, are never the result of mere dates and names, or of synoptical presentation. There is a world of difference between the synopsis of a good novel, and the novel itself.

History will ever remain a composition, — the work of art of a master. It is never a lifeless photograph that can be handed around. No one can grasp or represent faithfully the events of even a single year, with all its simultaneous facts and events, just as they occurred. He will be obliged to combine and group them, and thus create a fancy picture which bears the true features only in its general character.

The historian and the teacher of history are, or ought to be, artists in the true sense of the word. But the talent to create clear conceptions and vivid inner representations of historical events, and to suggest or cause them in the imagination of others, is almost as rare as creative geniuses are in the arts of poetry, painting, and sculpture. Not even a comprehension of the desirability of such models in historical presentation is found frequently. And yet we have in literature admirable masterpieces of historical writing which can be recommended heartily to teachers and pupils. They create indelible impressions upon the imagination.

Think of Thierry's "History of the Merovingians," Carlyle's "Letters and Speeches of Cromwell," Carlyle's "French Revolution," Prescott's "Conquest of Peru," and the wonderfully objective description of the beginning of Norman rule in England as found

in the history of the Abbey of St. Edmundsbury (in "Past and Present").

He who reads these books will get a positive picture, a picture in bold relief, of the respective times, and of the persons acting in them. Something of their spirit will touch him; and their history is henceforth engraved upon the tablet of his memory, as is an actual experience. Such books have a soul, something that cannot be found in a text-book of history. The latter is a graveyard. Only masters can produce pieces of art; but since good books like those mentioned above, and many others, are easily accessible, they should be made auxiliaries to the lessons in school and to the studies at home.

In connection with this, it may be urged, let the pupils read and study *important historical documents.* They have a peculiar convincing power, and can in no way be substituted by word of mouth, and certainly not by a synopsis.

No one who ever read the (Swiss) Sempach Letter, or the (Augsburg) Confession of Faith, or the Declaration of Independence, or the (French) Declaration of Human Rights, or Washington's Farewell Address, or Lincoln's Emancipation Proclamation, or King Frederick Wilhelm's Appeal to his People in 1812, and imbibed some of the spirit that dictated these papers, will ever forget them, or their leading ideas, and the events connected with them. The very fact that such words have been used, that such things have been said, that men have thus *made history*, will indelibly imprint

itself upon the memory. How many educated persons are able to give the leading ideas of these immortal documents? Test your friends by the fireside, dear reader, and oh the display of ignorance you will notice!

But I must come to a close. Dr. Hilty says, in substance, "I make this 'heretic' statement, that our text-books in history are much too methodically arranged. They permit free elbow-room to neither teacher nor pupils; I mean, free scope for self-thinking and self-activity. They make all original development next to impossible. The better the text-book, the weaker the teacher." The reader may take this *cum grano salis*, and try to digest it.

Summary. — My object has been to show, (1) that knowledge of history is a requisite of good citizenship; (2) that good instruction in history is conducive to the upbuilding of character; (3) that history should therefore be taught in the common schools; (4) that instruction in history should begin earlier than is commonly done; (5) that it should not be confined to history of our own country, because that would engender megalomania; (6) that the teacher of history must be a true teacher, not a text-book rider; (7) that instruction in history should be assisted by reference to noteworthy books on special history, and distinguished historical documents.

CAUSE AND EFFECT IN HISTORY.

(AFTER A TREATISE OF PROFESSOR HONIGSHEIM.)

NOT only in the history of our earth's formation, but in the history of man, of nations as well, has the "cataclysm-theory" ceased to be tenable. Modern physical science no longer accepts the statement that worlds and organisms are completely destroyed at certain crises, and continents and oceans arranged in a different order to form an entirely new creation. And, like geology, scientific history — that is, historical investigation — searches among all transmitted facts for cause and effect. Only contemporaries are surprised.

By succeeding generations cause and effect are seen to be the scheme planned long in advance, the operation of prepared expedients and mechanical forces. Such a view behind the scenes of the world's theatre is often painful, and yet helpful, to the mind. For wounds inflicted by truth do not cause loss in vital energy, but great gain. Indeed, it is only as we assure ourselves of the true nature of the forces at work in universal history, that we can reconcile ourselves with the experience, that the result often falls far behind justifiable expectations; that the advantage of one individual or nation is to the detriment of another; that without sacrifice no progress is possible.

The causes of the downfall of the Roman Republic form the subject of this discourse. In this connection, the thought occurred to me, to point out, at especially

notable periods in this historical sketch, the resemblances existing in our government of to-day, and to draw parallels; but this seemed scarcely appropriate for an assembly like the present. He must be stricken with blindness who could not discern the likeness between the dangers affecting the government in Rome and in America. Whoever will have the goodness to follow me attentively will be tempted, at several prominent points, to exchange the names of American statesmen for Roman ones; so similar, so identical, are the conditions in the Union with those of Rome two thousand years ago.

Some one may wish to suggest, that, among the nations mentioned in history, there may be at least one better suited than the Roman to the consideration given in this place. The history of the Roman people, I admit, is by no means the one which most charms the human mind. In this respect it is far surpassed by the Greek, particularly the Attic. I have, however, chosen the Roman, because it is in several points similar to the history of the United States, though in others, to be sure, as unlike as possible. Furthermore, it is of peculiar value to us as citizens of the United States, since no other historical epoch is so well fitted to serve as a storehouse of fruitful teaching for the circumstances by which we are surrounded. Yet that alone is not the cause of my selecting the Roman history. It is, that, of all histories, this one is the most instructive for knowledge of the laws in accordance with which states rise, flourish, and

decline. In harmony with the serious, prudent character of its people, it presents more clearly than does any other a gradual, progressive, self-unfolding development of all governmental relations. Not easily could a state be found in which both the detail of outward changes and the unfolding of the inner national life have proceeded so regularly. Outwardly and inwardly, in the prosperity and in the decay of the nation, a sudden change is scarcely visible.

This peculiarity is especially noticeable in the *external* history. From what slender, almost imperceptible beginnings, rose the Roman power! The starting-point of that mighty empire was a city in a district which would have offered scarcely space enough for our little city. This gradual, uninterrupted growth was by no means the sequence of a sudden illumination of political good fortune; but nothing more and nothing less than discriminating judgment, unusual persistence, and a peculiar aptitude for war, were the causes that led the city to subdue, first the surrounding regions, then all Italy, and that the Roman power finally reached out farther with resistless certainty, until the boundaries of the empire included nearly all of the then known world. The largest, fairest portions of the earth's surface, as then explored, were either Roman provinces or tributary states.

And just as gradually did the life of the tree decline, so that its fall at last could occur almost without noise.

But still more than the external, do the *internal* relations afford the sight of a slow, one might say thought-

ful, advance. Nowhere else may be traced so clearly the progress of a national growth in Nature's own unhurried manner. Until the year 509 B.C., — that is, for nearly two hundred and fifty years, — Rome was a monarchy. It is true, by the unanimous report of antiquity, this early monarchy was overthrown suddenly and with violence; but on closer inspection we see that it no longer had foundation in popular approval. The republican form of government was prepared long before, as plainly told by early writers, Livy in particular. Then followed the conflict of ranks and classes. Fully two hundred years elapsed from the beginning of the contest, before the common people, wresting one immunity after another from the aristocracy, attained to the full possession of political rights; and the organization of the government thereby reached its highest consummation.

In precisely similar manner as the progress, is the ruin of the republican constitution finally brought about, without shock or violent act. No, the splendid Roman Republic, after it has conquered the globe, is thoroughly unsettled in a long, quiet struggle, by various deadly conditions, and the way for its fall thereby so imperceptibly prepared, that the appearance in conclusion of the "one-man-power" of Cæsarism is made to appear inevitable necessity. Even the thought of a return to the old republican form can no more arise.

Since thus, in the course of Rome's history, violent transitions occur very seldom, but instead, the germs

of new forms may be traced in undisturbed growth through long periods, the study of this history offers opportunity for comparison as does that of no other people. But in all Roman history no other period offers so much instruction as the one which witnessed the downfall of its republican government.

When a free state, whose citizens have conquered the world by their wonderful strength, adapts itself with such composure to a monarchy, that the latter is never again seriously opposed, the constitutional change must indeed be accounted for by causes of the most unanswerable character. The merely incidental conquest by a despot could in no way explain it. Striking evidence is found, how little a monarchy thus established may count upon continuance among the numberless examples of Greek despots who were soon compelled to yield again to the popular republican pressure. In Rome, on the contrary, liberty is by no means restored through Cæsar's assassination; but a fresh struggle for supremacy begins, which does not cease until Octavianus succeeds in establishing his authority. And from that time on, whatever opposition occurs is directed against the person of the monarch, not against the fact of monarchy; which is conclusive proof that royal power must have had deep-reaching roots in the altered character and corresponding condition of the people. If we now direct our attention towards those conflicts of factions, preceding and directly assisting the fall of the Republic, and compare them, according to their origin and aim, with

the earlier ones between Patricians and Plebeians, we shall find, first of all, a very remarkable change in the national character, than which none other could be more favorable to the subversion of free government. For instance, while the earlier strifes between the nobility and the common people were almost always waged by the populace in behalf of their own well-understood interest, we now see the people set into commotion, even if under the pretence of their advantage, merely for the selfish purposes of their leaders. Thus Cæsar ranged himself, from the beginning of his career, on the side of the popular party, and sought to commend himself to it by his agrarian laws and other favors. But who does not see, from the whole history of the ambitious man, that by these means he wished to make the people instrumental to his personal aims; and that they were merely the price for which the people helped along Cæsar's ambitious schemes?

I must call your attention to another phase of the subject, from which it likewise follows that the people in general had become a spiritless tool in the hands of their leaders, and that their vital interests were of no consequence to the weal or woe of the state. We notice, for instance, that during the civil wars, many a time, *one* battle decides the contest; and we can draw the conclusion that every thing depended on the person of the leader, whom they renounced at once when the prospect of reward had vanished from his side.

But if a people which calls itself republican permits

itself to be thus maltreated, it must fare ill with its love of liberty. The possibility is at least suggested, that it may submit to the yoke of despotism without resistance. Both things, however, — the indifference of the masses to constitutional liberty, as well as the strife of party chiefs for unlimited extension of power, could have arisen only from deep moral degradation. The perversion of morality, which increased in equal measure with external power, is the fundamental evil of that time; yes, it is a prominent cause of the overthrow of the republican government, though by no means the only one, as I mean to show farther on.

In all historical writings, ancient and modern, mention is chiefly made of the moral depravity among the influential and powerful classes, when speaking of the deterioration of the Roman people. To me, on the contrary, it seems as if the moral sense of the lower classes is by far the more important and the more significant element for the dismemberment of the government.

But if we question how it comes that the *plebs* during the last century of the free state became so contemptible a class, there is presented for consideration as the peculiar evil of the state, on one side, the gradual increase in the vast class without property, the pauper element; on the other side, the vast accumulation of wealth, and especially of landed property, in the hands of the few. Between these extremes the middle class stands on poor footing, and even dis-

appears entirely in consequence of impoverishment. But on this class depends the strength of every state; the middle class in its turn depends upon agriculture. The impoverishment of this class, however, and the decay of agriculture, by which the death-blow was given to the welfare of the small land-owners, began during one of the most brilliant periods in Roman history, the Second Punic War (218–201 B.C.).

It was the most bitter revenge that the finally defeated Hannibal of Carthage could have taken on Rome at his departure from Italy, that in consequence of his victorious passage through the whole peninsula, in the year 201 B.C., he left behind him an Italy wasted and reduced beyond example. Already during the war had the small land-owners, disregarding their ruined possessions, rushed in crowds towards the city of Rome; nor could they be again removed from it, not even by force.

During the wearisome war the burdens of debt among the small proprietors, a class already greatly enlarged, increased so much that it was scarcely possible for them, after the close of the war, to cultivate their lands again.

Some of you know from experience what consequences follow in the train of war, and likewise how difficult it is to overcome these consequences; and now remember that the Second Punic War was waged with the greatest severity in their own land for seventeen years. This war resulted in a devastation of the open country such as occurred in greater degree only in the

Thirty Years' War during the seventeenth century. In addition to this, reflect that what had been so ruthlessly destroyed in Italy in one year, required the labor of ten years to be restored. For this reason the poor man lost courage, and we all know that the Latin race lacked the unconquerable vitality of the Germanic race. The ground adapted to cultivation passed more and more into the hands of the wealthy few, who through bargain, usury, and craft or even violence, dispossessed the humble proprietor, and even acquired the exclusive use of the incorporated common lands, in many cases even secured ownership. Moreover, they had their land worked by slaves; thus land ceased to give support to free citizens.

This decay of the middle class had so extended up to the year 137, that Tiberius Gracchus, during a journey through Etruria, found slaves at the plough in almost every case; on which account, in an effective speech to the people, he used the words, "The so-called masters of the world do not possess a clod of earth as their own property."

The city of Rome appeared the most natural place of refuge to all the ruined tribes in Italy; and, of course, an excessive increase of the poorer class occurred in consequence. But even here no respectable occupation could be found except for him who was adapted or inclined to the military profession. Ancient Rome recognized only two honorable vocations for the free-born citizen, — agriculture and war. Trade and industrial pursuits had always been foreign to the

Romans. They proudly held these to be necessary evils, and unworthy occupations for a free man. They rather left it to foreigners and serfs to enjoy the rich profit which manual labor and mercantile enterprises bring in, than that they should have sullied their dignity with the stain of vulgar occupations. All professional labor, even the decoration of the palaces, was performed by slaves, men and women. All the conditions mentioned taken together formed the natural foundation, on which was formed, more quickly in Rome than in the Europe of to-day, a frightfully large class of the lower order. This class, as everywhere, was driven by the very nature of the case into immorality, and became a tool to be bought with gold, and ready for any thing, — a class, too, which did not shrink from revolts and revolutions, but, on the contrary, regarded these as welcome opportunities.

And there was no lack of persons to bribe the hands of this all-powerful order for enterprises of such character; for the ancient lofty Roman spirit had also disappeared from the *upper* ranks of society, and in its place luxury and avarice had entered, coupled with boundless ambition. These were in a high degree the characteristic features of the upper classes in those days.

The old proverbial simplicity of a Cincinnatus, Curius, and Fabricius, could have continued only so long as Rome had retained its simple conditions, when its wars were waged only with pastoral people whose conquest only extended its might, but did not

increase wealth by enormous booty and spoils. A crisis must have intervened, when contact began with the superfine, wealthy, and luxurious Greeks. The subjugation of the Eastern empires entirely destroyed the last protection of the ancient Roman spirit.

The poet calls it Nemesis, the Nemesis of universal history. Foolish talk! Nothing is presented in such events but the results of given causes. The rushing together of two streams does not double, but *quadruples*, the force of their waters. Let no one wonder, therefore, at the decay of morality in ancient Rome; let him see therein nothing remarkable. It simply but plainly proves, that every nation which does not, or can not, refrain from intimate contact with other nations, stands under the law of universal application; in other words, is weakened by them. It *must* have happened as it did happen; for with the acquisition of higher culture from others the disadvantages of that culture must also be accepted. And these disadvantages increased in geometrical progression. With the taste for greater refinement, for the art-treasures of the Greeks, the Grecian idea of living held sway, and Grecian luxury and fastidiousness entered into the homes of the Roman nobles. The first traces of this change in the national character likewise appear in the time of the Second Punic War. The robbery of works of art became a habit with time. Extortion in the enemy's land increased systematically. In order to exhibit in its full force this characteristic, which had become general with time among the influential

Romans, it will suffice to cite, instead of many, one conspicuous example, which has attained unenviable celebrity through Cicero's orations: I mean Verres, the governor of Sicily, who was publicly accused by Cicero in his famous "Orations against Verres" on account of his shameful oppression; and Cicero so vigorously attacked him, that he voluntarily went into exile. Cicero does not hesitate, in his accusations, to put into the mouths of the inhabitants of Sicily the words, "Verres has plundered all the gold and silver and treasures of the island during his administration." Now, whether that be a rhetorical exaggeration, or not, the essential fact is not affected. When he reports the value of the booty at a thousand million sesterces, he seems specially to confirm the publicity of the robbery.

What more natural than that with the rapacity described, with this influx of the whole world's wealth into Rome, the most unbounded dissipation, and to us unimaginable extravagance, should go hand in hand? In consequence of these things, Rome became a cesspool of vice. The scope of this discourse does not permit me to go into a closer description of the refined debaucheries. Neither is this the place to picture in detail the monstrous extravagance which began to prevail at banquets and spectacles, in dress and buildings and furniture.

Let the remark suffice, that Sallust, although himself living in the midst of the depraved age, and therefore very moderate in his judgment, introduces his short recital of these evils of the time with the words,

"These things would seem in the highest degree incredible to him who had not seen them with his own eyes." Indeed, one may, even without possessing a special acquaintance with the history of luxury, affirm without hesitation that never, in the course of all history, had dissipation and excess reached a similar height as among the Romans of the higher ranks, for the simple reason that at no time could the means for these have been provided so profusely. What foolishly large sums were expended by single citizens of Rome for articles of luxury, may be learned from the following facts. Cato had tapestries brought from Babylon, for the cushions of his banquet-hall, which cost him eight hundred thousand sesterces (thirty thousand dollars). The greatest extravagance, however, was reached in furniture made from the cypress-wood growing at the foot of the Atlas Mountains. The peculiarity of this wood consists in a knot in the root, which after preparation exhibits a resemblance to a panther-skin or peacock-feathers. One million sesterces (thirty-five thousand dollars) was paid for two such tables, owned by Gallus and Cethegus; and Cicero, although he was not rich, paid as much for one such table. Our statesmen and senators have (the Lord be thanked!) not yet carried things as far as that. Crassus is reported to have owned real estate in the city of Rome to the amount of one hundred and seventy millions of sesterces (twelve million dollars).

Reverence for law disappeared; truth and faith were subjects for ridicule; perjury, a daily occurrence.

Marriage lost its sanctity, education was given up entirely. The youthful Romans of rank grew up amid the improprieties, crimes, and outrages which their parents — yes, even the state itself — shamelessly committed. The excavated walls of Pompeii bear witness to acts which seem incredible, and which no author had the courage to chronicle. The brushes or colors of the artists proved to be vile enough for the occasion. How must such examples have taken effect on youthful dispositions, especially as the education and training of the young was commonly intrusted to slaves of Greek descent!

Let us once more hear Sallust in regard to the result of such training: "The disposition of youth, early directed towards evil, could not easily escape an inclination towards sensual pleasures; all the more eagerly was it bent in every way upon wealth and lavish expenditure." Now, if the paternal property did not suffice for the unlimited expenses, if every thing had been squandered or entirely covered with debts, a longing glance was turned toward the provinces in order to extort from these the means for new prodigality. But, on the other hand, it was possible to obtain these provincial appointments only through bribery.

With the mention of these competitions, I have indicated the ground upon which the baseness of the upper classes and the recklessness of the populace met. And nothing is more natural than that these two extremes should meet. This reciprocal action greatly

precipitated the further ruin and destruction of the government.

From the Third Punic War, and already during its continuance, the occupation of official positions depended no longer upon worth and capability, but upon the amount and extent of the bribe. The destitute, suffering people regarded bribery as a regular means of livelihood. It did not stop with electoral corruption, which was done in secret, and often amounted to millions of sesterces: no, ambition and party strife on the one hand, cowardice and depravity, sometimes sheer starvation, on the other, were of such a character, that the people made bold to present themselves to the brokers who bought not only the votes of the populace for elections, but also engaged in advance their strong right arms for murder and strife. All too often such scenes occurred at elections. Laws proved of no avail against the general depravity and the unbounded corruption. There is no more striking proof of the hopelessness in the conditions then existing, than that Cicero himself openly protected Murena who was accused of notorious briberies. That was equivalent to a legalization of lawlessness.

But however much the diminution of free sentiment among the masses may have made easy and prepared the downfall of the republican government, they greatly err who would make this moral debasement the sole or even the chief cause for the appearance of monarchy as a necessary sequence. That such a conclusion is too precipitate, may be seen by a reference to

republics, ancient and modern, in which the greatest depravity is known to have held sway. In Carthage, the republican form of government went down only with the city; and it was maintained in Venice for centuries, almost without any internal disturbance. To be sure, the so-called republics were not democratic; but from the preceding statements concerning the conduct of the lower and the upper ranks, it is sufficiently plain that also in Rome, after the time of the Gracchi, the democratic form had really failed, if not formally. Even if the issue of elections or legislation depended upon the masses, they were subservient almost entirely to the aims of ambitious party chiefs. Moreover, we find the positions with which the real power was associated, without exception, in possession of the most influential families, the so-called Optimates.

The demoralization had already gone so far, eighty years before our era, that the people proper held only the humble offices. The upper official positions were passed from hand to hand among the nobles, thus strengthening their sway. Nobility of rank and birth formed an obstinate phalanx against all those who believed they might rely upon their merits.

This aristocracy might have existed amid the greatest degradation of morals, and monarchy could have been avoided; but internal dissensions were not to be stifled. Venice, for example, existed for centuries under an aristocracy. It is granted that this republic was not democratic, but it was nevertheless a republic. Had the conditions shaped themselves in Rome as

they did later in Venice, the necessity for a monarchy would not have appeared. We see from this that the great depravity and corruption were not the only causes of the downfall of the republican government among the Romans. Other causes must have been involved to result in its failure, despite its splendid past; and this, indeed, was the case.

The second effective lever for the overturning of the government was the dissimilar composition of the state as a whole, which made it impossible under a republican constitution to guard against internal collisions and disturbances. From the collisions civil wars arose as a natural sequence, and these could only end in a military despotism. No authority has more clearly stated the elements of which the Roman state was composed, than Guizot. May I be permitted to quote him: —

"Rome, in its origin, was a mere municipality, a corporation. In Italy, around Rome, we find nothing but cities, — no country places, no villages. The country was cultivated, but not peopled. The proprietors dwelt in cities. If we follow the history of Rome, we find that she founded or conquered a host of cities. It was with cities she fought, it was with cities she treated, into cities she sent colonies. In Gaul and Spain we meet with nothing but cities; the country around is marsh and forest. In the monuments left us of ancient Rome, we find great roads extending from city to city; but the thousands of little by-paths now intersecting every part of the country were unknown. Neither do we find traces of the immense number of churches, castles, country-seats, and villages, which were spread all over the country during the Middle Ages. The only bequests of Rome consist of vast monuments impressed with

municipal character, destined for a numerous population crowded into a single spot. A municipal corporation like Rome might be able to conquer the world; but it was a much more difficult task to mould it into one compact body."

The Roman state, then, had arisen from a municipality, for which, according to all historical experience, a republican form of government was certainly most suitable. In those times, republican methods of conducting affairs were really adapted only to small countries or municipalities; for means of communication were lacking to provide the intercourse necessary to such an administration. All that is greatly altered in our times, where telegraph and steam power unite the most widely separated portions of a composite nation. As the Roman state widened by conquest, it suited the pride of the conquerors, that the newly added portions should unite with the conquering power only in a relation of subjection. This is the most consequential mistake in the Roman policy. Pride blinded the victors; and instead of granting equal rights to the conquered districts, they reduced them to serfdom, and took away from them for all future time the opportunity to attain political equality. It is plainly to be seen that the condition of such a republic was insecure; for the people of the conquered provinces attempted to regain their independence whenever danger threatened Rome, the head of the nation. They would have considered it an honor to take part with Rome's citizens in the destinies of the state, but they would never have accepted cheerfully a fate such as became theirs.

History offers proofs in abundance of that statement. After the disastrous days at Cannæ, when Hannibal had nearly vanquished Rome, there occurred a general revolt of the confederates and dependencies. To be sure, the favorable change in the war at that time returned every thing to the old state of things.

But the effort of the Italian races to rise from their dependent condition was repeated later and more vigorously; only with the difference, that they no longer wished to lead a national life separated from Rome, but to share with her in the rule of the world. Vainly did the aristocrats of Rome seek to evade this demand: the dangerous Social War threatened the destruction of Rome, and there finally remained no expedient to arrest the dissolution of the body politic except the granting of civil rights to all Italians.

The extension of civil equality to all Italians marks so important a moment in the vital history of the Republic, that I cannot forbear to dwell upon it a little. They intended by this measure to renew and refresh, as it were, the debased city inhabitants, by a healthful infusion from the rural population; in other words, to restore the middle class. They intended to convert the Roman city into a Roman nation. But they made a mistake, or, rather, half did what could be cured only by a radical reform.

In the first place, it may be said with truth, that not even the slightest improvement, so hoped for and desired, may be noticed in the behavior of the Roman populace after the real incorporation of the Italians,

in 81 B.C.: on the contrary, the popular assemblies and conventions were still as heretofore a play-ball in the hands of ambitious demagogues, greedy for spoils. That attempt to fit the form of a municipality to a whole country must of necessity have been a failure. Just imagine, how could the real middle class, plainly the most important element in the new body of citizens, from whose presence in the assemblies something beneficial was to be hoped, — how could this class have been able to make frequent journeys to Rome, to the neglect of their own affairs, in order to make their political rights of value there by exercising them?

What immense additions, on the other hand, were received by the two extremes of Rome's population, the low-born and the aristocratic! The prominent and wealthiest of the new citizens were soon driven to go the same way with the aristocratic party; that is, crowd their way to the head by unworthy means, On the other hand, we see needy crowds, averse to labor, who now flow directly towards Rome, like refuse into a sewer, to obtain through bribery and lavish expense the means of a comfortable support, a life of idleness. Rome, which had only four hundred and fifty thousand inhabitants in 70 B.C., had four million one hundred and sixty-five thousand inhabitants in 29 B.C., an increase of more than nine hundred per cent.

Thus the exact opposite was attained of what was intended by the new law. It was a new ferment thrown into the seething mass of the Roman populace. The question involuntarily presents itself: Why did it

not occur to the Romans, when civil and electoral rights were given the Italians, to introduce the representative system? This would have been the best way to ascertain the common will of the nation; and they would have been able to dispense with so many legislative and popular assemblies, bringing ruin to the city. But this system remained foreign to all antiquity, at least as far as representation of all the people included in the government was concerned. Nor could this scarcely have been otherwise.

The great Oriental kingdoms, from time immemorial, succumbed to despotism, as they even to this day languish under it. In the little free states of Greece, as for a long time among the Romans, the will of the controlling majority of the citizens in regard to important affairs could be learned all too easily by personal votes or elections, so that the need of a representative system could not have made itself felt. It was not thought of later, when this need did appear, for the reason that it was the custom to consider participation in legislation and state-management as a personal right, inseparable from the dignity of a free citizen. It certainly presents a limitation to the nature of a genuine democracy, which is only to be found where every individual citizen shares, or may share, in the expression of the common will. (This thoroughly democratic method has lately, in certain places, been converted into a limited representative system in which new bills, legal decisions, and even appointments, are subjected to a popular vote, as is done in Switzerland.)

Nor must it be forgotten that the necessity of the representative system for Greeks and Romans appeared just at a time when what was best in their political constitution had outlived its day; the political sense had almost perished among the people.

But even if the leading heads in Rome could have made the resolution to introduce popular representation, Italy could not have congratulated itself as a republic on a stability needful for its plans and enduring peace, without other comprehensive changes. It was not only too large (too large for the scanty means of communication of that time), but it was composed of too diverse elements, which was the special reason that the form of a united republic under the direction of a central power would have been more suitable.

A remedy could have been found for the Roman colossus, against the increased danger of factions in its interior; namely, the federal republic. This kind of free states, in which the central power is restricted to the management of such affairs as must concern the whole and rise from the whole, while freest elbow-room is left to each state for the management of its own affairs, was alone able to encounter the dangers indicated with which greater republics must universally contend. Not only have municipal confederations, like the Æolian, the Ionian, the Doric, of ancient times, or the Hanseatic League of the Middle Ages, been able to maintain in this way the republican form of government, and attain great prosperity; but there are examples also in the present time of important confedera-

tions, — our American Union of States, the numerous republics in South America, nay, one even in the heart of Europe, Switzerland, — which prove the successful adaptation of this form of government.

The prominent statesmen of Rome saw the need of this change, but the possibility of its execution was not obvious. For, while the above-named republics of modern times have grown up naturally by the union of separate states which might have existed near each other without great rivalry, the opposite plan must have been pursued in the Roman states. It could have been attained only by a breaking-up of the firmly united national body, which would have been attended with the giving-up of privileges centuries old. But it is a fact of experience, that a people will sooner give up a right secured by law, than a privilege sanctioned by time or custom. By the way of victory, conquest, and triumph, and in spite of these, Rome ran to meet its ruin. The state fell sick from its own greatness.

The forces mentioned as contributing to the overthrow of the free government in Rome are about all which present themselves to us in the study of Roman history. At least, no new ones were added from the year 86 B.C. to the final crash. I will not go into the highly interesting struggle which the dying republic carried on against the near and nearer approaching monarchical encroachment; and we will in conclusion only ask, How could Rome so long ward off monarchy? The cause of it is twofold. A people with whose manner of life and thought republican tendencies and

customs have been most closely intwined for more than four centuries, — such a people can accustom themselves only very slowly to the sight of a monarch. His sudden appearance they are not able to endure. Secondly, it is natural that the nobles will not soon put up with the rule of one from their own number, to disturb them in their presumptive privileges.

How powerful were these two elements of opposition to monarchy, is plainly seen in the history of that man, of whom his flatterers said that the imperial vocation was written on his brow. With what assiduity did Cæsar labor at the erection of a royal throne! The power of royalty was already attained by him, chiefly through his accepting the perpetual dictatorship. There was lacking only the title to crown the labors of his life. But he was compelled to atone with his life for this concealed design.

And yet his murderers were mistaken who performed the justifiable deed under the guidance of Brutus, if they believed that by the murder of the tyrant they had crushed tyranny, and restored life to the free government. Civil wars broke out afresh with unrestrained fury. But when the most daring republicans had fallen in the fierce contests, or by proscription, and the multitude longed for rest, it was possible for the crafty victor at Actium, Octavianus, to establish his imperial power, though invested with republican forms.

But the Roman republic had been borne to its tomb, with no hope of a resurrection!

A GLANCE INTO THE MIDDLE AGES.

The general reader in this country knows little of the history of the Middle Ages; but he has a dim idea that the historian, when painting a picture of mediæval history, dips his brush in gray, and paints on dark background. This is not far from the literal truth. Though this period — from the destruction of the Western Roman Empire, A.D. 476, to the beginning of the Reformation, 1517, — is the most lamentable in history, it is by no means unproductive of interesting lessons, not even to us who live in an age of unprecedented enlightenment, and miraculous velocity in all domains of human exertion. I shall refrain from moralizing in this paper, and merely state facts which I trust will speak for themselves.

After the chaos which followed in the wake of the great migration (from A.D. 375 till 572) had been disentangled to some degree; after the natives, races, and tribes of Europe had each found a new point of centralization, and new states began to crystallize; after the empires of the Goths had perished, and the Franks under Charlemagne (768 to 814) had removed the political centre of gravitation from the Tiber to the Rhine, — four hundred years after the first appearance of the Huns in Europe, — a new life began in history.

The atrocities of the wandering swarms and barbarous hordes had ceased. They had caused an almost incredible devastation in Europe, had virtually wiped out antique culture, destroyed the arts of peace, and

disturbed all friendly relations and intercourse. The tempest, which for more than two hundred years had raged through the fairest portions of Europe, had spent its fury; but the sequences of this unsettled state of affairs were terrible. The permanent results of the great chaos may be summarized in a few words: a general state of exhaustion; subjugation of the common people into serfdom or total slavery; the establishment of the "fist-law;" prevalence of barbarous manners and morals; paralyzed commerce and industry; almost exclusive practice in the use of weapons, and encouragement in the science of war.

Numberless were the points of hostile contact between men; friendly relations and communication between neighbors were greatly diminished, almost wholly disappeared. Poverty and necessary privation, followed by oblivion of comfort and finer enjoyments of life, made intercourse with others, if not impossible, certainly undesirable. Utter despair had blunted the nobler feelings of man, and he sank to the level of the brute. With commiseration we look upon such dark scenes of unsociability, want of culture, and frightful degeneracy.

Nature seemed to take part in this lamentable situation, and revealed, in the sad shape of the country, the defects of human society. Even Italy, the garden of Europe, had changed to a wilderness of forests and swamps. Wolves lived in regions where formerly upon rich, fertile fields, happy human beings were wont to promenade. Worse even than in Italy it appears to

have been beyond the Alps. In every province, large tracts of land lay waste. Not only cultivating hands, nay, *owners* of the land, were wanting. The right of occupancy found the widest and most daring interpretation. And the land which was under cultivation was more used for raising cattle than for agriculture.

The greater part of the land was devoted to hunting, an occupation which was not a mere amusement, but a regular pursuit and a means of sustenance for the nobles. The least failure of crops, every devastation by an enemy, every unexpected passage of troops, caused a famine. The people provided only for the most pressing wants, and tilled the soil barely enough to meet these wants. Pestilence and famine prevented a great increase in the population, such as is witnessed in our century.

Industry and commerce had come almost to a standstill. The common people in their poverty made shift with the work of their unskilled hands. The few large land-owners employed serfs as mechanics, who attended to furniture, implements, and wearing-apparel, in the rudest possible manner. There were but few cities in Europe, and these were remnants of former Roman municipalities. These had degenerated to mere shadows of their former glory, and their sphere of industrial activity was exceedingly small.

It is obvious, then, that the very requisites of commerce were wanting; namely, raw material and agricultural products, as well as products of industry, skill, and art. But also the conditions under which

alone commerce can flourish, and which are indispensable for intercommunication among nations, — to wit, security of law, internal and external peace, and mutual acquaintance, — all these conditions were sadly wanting. At no time had commercial intercourse between the different parts of Europe, or between Europe and the countries of Asia, been wholly wanting. But during the age of the greatest darkness and insecurity, when the knowledge of luxuries, and, indeed, when man's needs and desires, were of the scantiest sort, and when roads and bridges had fallen into decay, and all the means of communication were of the rudest, this intercourse was comparatively insignificant.

Aside from some dim reminiscences of ancient geographical knowledge, kept alive in convent-schools and at the court of princes, more for the purpose of satisfying idle curiosity or a fancy for the miraculous than for the value of true knowledge and for the sake of its practical utility, all knowledge of remote or even neighboring countries was lost during the anarchy and barbarism which prevailed in the earlier periods of the Middle Ages. Astonishing, really incredible, are the examples of ignorance mentioned — and often displayed — by authors of that time. The provinces of one and the same empire or kingdom were separated by a dense fog of ignorance. It was a venturesome undertaking to travel a hundred miles.

Though hospitality — generally a virtue fostered only in countries that are not visited frequently — was considered a duty, and enjoined by strict laws,

it was inadequate under the prevailing misery, and could not take the place of inns and hostelries such as came into existence later, when the population again became fluctuating, prompted by commerce and manifold industrial activities. Hospitality offered insufficient protection against the insolent practitioners of the "fist-law," and against the barbarous hostility of local and provincial customs and laws.

Robbery and theft became so common that every one lost his goods, and in many cases his life, who dared to travel without strong escort, or failed to buy from the lord of the soil the right of way through his possessions. The threats of worldly and clerical potentates against this prevailing spirit of lawlessness and violence were in vain. Robbing inoffensive wanderers was not considered a crime. The "nobles" even degraded themselves to waylayers: why should their retainers have any scruples?

Merchants, who were then scarcely more than peddlers, looked with dismay at every toll-gate, and trembled when they beheld the rudely reared walls of a strong castle loom up upon a hill or cliff. The knights were all robbers, sitting on high in their fortresses, and swooping down like hawks on the fords, on the highways, on the moorlands, on the forests, on the little settlements below them. Even the judges were robbers, thieves, and receivers of stolen goods. King Charles the Bald found it necessary to make his counts and judges swear solemnly that they would neither be thieves, nor receive stolen goods.

When the traveller had succeeded in escaping the robbers, he was made the prey of barbarous law. Humanity and holy right cried in vain for sympathy with the shipwrecked. The captured cargo at the strand — yea, even the wrecked persons themselves — were claimed by the owners of the strand. In many countries it was permitted, by a law which had grown out of long custom, to seize the contents of a wagon that had been broken on the road by accident; and a ship that had struck bottom on the river was often legally claimed by the lords of the abutting land.

Any one who staid "a year and a day" at the same place became the serf of the lord of the place. The latter inherited the chattels of a traveller who died on his soil. In some countries the stranger stood completely outside of law: he could be killed with impunity. Inhabitants of one and the same state were considered strangers if they travelled to a neighboring province. Familiarity with the language was of no avail.

During the reign of Charlemagne's weak successors, the inhabitants of the coast of France were driven into the interior by the Northmen, who devastated their houses and land. Instead of being supported and cared for by the people living inland, these fugitives were considered welcome booty, and pressed into slave-service. *Horribile dictu !*

Such was life during the Dark Ages, before the cities began to establish law and order, exercise self-government, and guarantee protection of property. It

is easily seen that the never-dying spirit of war and wild anarchy made gentle manners impossible. The "nobles" in their secluded castles on the mountains gave themselves up to coarse debauchery; the common people, under the yoke of serfdom, sank into brutality, or into a mere cowardly, joyless vegetating. It was but natural that the absolute want of artistic taste and scientific knowledge should prevent a better enjoyment of life, and that moral feelings and intellectual powers which were abused and trampled upon by the pride of the nobles and an overbearing priesthood should develop hideous extuberances and monstrous social deformities.

However, even during these centuries of the coarsest brutality, precious virtues were found, — virtues which are rare in our age of superfine civilization. Thus we see among the better people of all strata of society the virtue of domesticity developed, especially in the gentler sex, — hospitality, frugality, unassuming integrity, and self-denying charity. In many gratifying and touching examples of such virtues, evidence is found, that, *however depraved the age, there always remains a solidified residue of ethical culture* which no vicissitudes can shake. The manifold afflictions and the never-ceasing storm in the political world led the people to religious contemplation; and from their simplicity in matters of faith and devout trust arose consolations, noble blossoms of life, and a moral strength for which the proudest philosophy may well have envied the lowliest of toilers.

INVENTIONS DURING THE MIDDLE AGES.

It is highly interesting, and no less instructive, to look back into history, and ruminate in far-distant centuries, to find the beginnings of culture as represented by inventions of various kinds. The great inventions of our age dwindle down somewhat when compared with inventions that gave rise to them. Who ever would have thought of a type-writer if Gutenburg had not thought of separating the letters of the wooden page of a Psalter? Who would have thought of a knitting-machine, if the needles in the hands of diligent women had not furnished generations with socks and stockings? And so on *ad infinitum*.

Every inventor stands on the shoulders of others who have preceded him. A few statements as to the age of certain inventions and discoveries may give us a better idea of their value, and will certainly increase our appreciation of the wonderful velocity with which the human intellect has grown in civilized countries.

From time immemorial the Germanic tribes (which term includes also the Anglo-Saxons) knew how to spin and weave flax, but they did not wear shirts until the seventh century after Christ; and not until the fourteenth century had the shirt become a garment worn by all.

Woollen garments were in use at the time of Charlemagne (768–814). Cotton was too expensive, and could not be used extensively; that is, not until Vasco da Gama had discovered the sea route to India. The

culture of the silkworm was known in Greece at the time of the Emperor Justinian (555). The silkworm was brought to Spain by the Moors (800), and in France it was introduced in the wake of the first crusades.

During the eleventh century the Arabs brought the art of making paper of cotton to Spain, and from there it rapidly spread over Europe. Linen paper was not known before the fourteenth century, and the Hollanders were the first to manufacture it and extensively trade with it.

Goose-quills have been in use ever since the sixth century. The art of knitting was, according to the best authorities, invented in North Germany (about 1500). Ribbon-makers were numerous in Germany during the thirteenth, and button-workers (who, however, worked exclusively in metal) in the fourteenth, century.

Glass, which was known to the ancients, was not used for window-panes until some time in the thirteenth century, and in churches it was used sooner than in dwellings. During the fifteenth century it aroused a great deal of wonder to find houses provided with glass windows. Toward the end of the Middle Ages the first glass mirrors were made, but metallic mirrors predominated.

Up to the fourteenth century open fireplaces were in use all over Central Europe; after that stoves came in use, but chimneys were not built until the middle of the sixteenth century.

Wooden spoons and plates in form of dishes were used by the ancient Germans; knives came in use in the thirteenth, while forks and metallic spoons did not make their appearance until the sixteenth century.

Their food was taken by all participants of the meal from the same bowl. Pots were made very early; but they were made without enamel, as is seen from the urns excavated here and there. Oil-lamps were used for lighting the rooms. Salt was found and used very early. Barley and oats were brewed into mead, which was subsequently improved during the ninth century by the use of hops. Wine was known in the most ancient times. Sugar was obtained from Syria. Tea, coffee, chocolate, as well as tobacco, were unknown during the Middle Ages.

Of the different kinds of grain now known, only barley and oats were raised; for the other kinds, the climate seems to have been too severe. The plough was of rude construction, and was drawn by oxen. During the sixth century rye was brought to Germany by Slavic tribes, while wheat was introduced by Frenchmen who brought it from Italy. Buckwheat came by way of Greece into Central Europe, toward the end of the crusades (1291). In the most ancient times the people freed the wheat from the ear by stepping on and riding over it; the flail was introduced by the Romans.

Mining also came through the Romans, and even in Charlemagne's time metals were thus obtained. The Franks built water-mills at 500 after Christ: before

that the people had only hand and tread mills. Windmills did not come into use until the tenth, and sawmills in the fourteenth century. At about the same time, the pulling of wire was invented by a Nuremberg citizen. Of course this led to the invention of needles and pins. Up to the ninth century, only sun-dials, water and sand clocks, were known. The first wheel-clocks were made in Italy. Padua is said to have had the first tower-clock in 1344; and at about 1500 a Nuremberg citizen invented the watches known from their forms as Nuremberg eggs.

Under the influence of foreign commerce, manufactories of various kinds originated in Italian cities. Milan furnished the best and most costly weapons and armors; Venice, the most elegant jewelry and articles of luxury; Genoa and Bologna, the richest silk stuffs, satin, velvet, and embroideries. Many inventions of lasting value were made by these thrifty people. Spino of Piso invented a kind of magnifying lenses, the first spectacles ever made. In Fainza the process of pottery was invented, which is to this day unsurpassed (our so-called faience). At Venice the manufacture of glass and mirrors became famous, and in this same city it was where the first clock with a pendulum was made.

The invention of making paper from rags was made in Padua, and here it was where the first tallow candle was dipped. Bells were cast in Italy at about 400, but not until the middle of the sixth century were they found in general use in cloisters and churches. In the

twelfth century the most noted bell-founderies were found in Nuremberg and Augsburg. Charlemagne procured a wind-organ in Constantinople, and had it put up in Aix-la-Chapelle; thereupon the building of organs became a favorite industry in Central Europe. The most ancient organs had only ten keys, each between four and six inches wide; these keys had to be knocked down with the fist. Our present organs with their complicated construction are inventions of very recent time.

The art of sculpture was introduced into Germany toward the end of the Middle Ages, and painters were known at the time of Henry the First. Engraving on copper was invented during the fifteenth century. Drug-stores were opened by Arabs who came by way of Spain, and in the thirteenth century Augsburg had the first drug-store; but the druggists were grocers' and dealers in spices and comfits. Physicians, as the word is now applied, were not known in the Middle Ages, only ignorant quacks. The medical science took an upward start in consequence of the foundation of universities and scientific schools.

NATURAL CALLING, OR NOT?

Is every person predestined for a calling? Approach the question regardless of preconceived notions, and you will have to consider that every one has his own peculiar face, his own form; each of his limbs or hands is peculiarly shaped, and cannot be duplicated by that of any other human being. His senses and faculties

are in their combination so wonderfully and peculiarly arranged, that there may perhaps be found a similarity, but never an exact duplicate. This proves, if any thing, that no two men can be exactly alike in faculties, qualifications, tendencies, and accomplishments, so as to feel at any time, and under all circumstances, exactly the same impulse for action; every one will move in a direction differing from that of all other men. Evidently, then, the peculiar mixture of which every individual consists tends towards confirming the belief that *every one has a calling;* that is, every person must be specially well fitted for one kind of work, and for no other as well.

That would seem to settle the question, but it does so only apparently. The child is a "soft and yielding being;" plant-like, he accommodates himself to influences which play upon him. His aptitudes grow exuberantly on the one side, and become crippled on the other, as friendly or hostile influences prevail. A symmetrically shaped plant will become twisted and distorted if placed against a wall; it depends upon the treatment of the gardener whether a tree will spend its energy in producing leaves or fruit. A boy of six years may have a talent for art; his sense of form and color may be very pronounced: yet after five years he may be found to have apparently lost that faculty, and developed in a direction which makes the observer prophesy that the boy will become a great lawyer. And again, after some years, he may be found to have developed great skill in manual occupation, having

apparently pressed into the background his liking for art and literature.

These are no hypothetic cases: every observant educator will have come to the conclusion, ere this, that it is utterly unfruitful and perilous to fore-ordain a pupil's future. This being the case, it seems to me wise to follow the advice of eminent men: to wit, develop harmoniously all the talents that manifest themselves in the child, and leave the choice of occupation or calling to the developed and ripe judgment of the youth. Do not make this choice irrevocable. Give every one the greatest possible freedom for changing his profession, or occupation, or calling (or give it whatever name you will), if he comes to the conclusion that he missed it in his first choice.

A human being who has had the chance and manifold opportunities for testing his natural gifts, and is permitted to exert himself in many directions, will certainly find his natural calling, and achieve great success. Let there be no arbitrary rules, no guild regulations; but let us maintain that liberty of action which has made this nation what it is, the greatest, noblest, most talented, most energetic, most successful, and therefore happiest, nation on the face of the earth.

A BIRD'S-EYE VIEW OF MODERN HISTORY.

(Characteristics of the new era: extension of man's horizon by great discoveries; shaking of papacy and hierarchy by the Reformation; changes in the art of warfare; downfall of feudalism, and development of absolute monarchies; changed attitude of the states toward each other; balance of power; political and social revolutions. Four periods of modern history.)

THE beginning of the Middle Ages is marked by a general revolution all over the then known world. Great and powerful political structures were violently overthrown during the fourth and fifth centuries after Christ. The Roman Empire, then the centre of gravitation of political life in Europe, was shattered; and amid and upon its ruins, Germanic tribes built new states. The limits of ancient history, therefore, are sharply defined. It appears that the beginning of modern history is not inaugurated by such violent changes. For, aside from the destruction of the Greek Empire by the Turks (1453), the European nations remain the same, and the boundaries of their possessions remain essentially unchanged. Yet, at the close of the fifteenth century, so many new events and important changes take place, that that century may justly be regarded the end of the Middle Ages. All political life, all relations among men, have since then assumed so different a character, that it seems justifiable to give the time that elapsed since then the caption of a grand division of history. In contradistinction to ancient history, we call it modern history.

First, the historical stage is enlarged almost immeasurably by the discoveries of Columbus and Vasco

di Gama. While formerly the countries of the Mediterranean were the only historical ground known, the whole face of the earth now comes into consideration. With the horizon of vision, the scope of thought, of power, of influence and action, is widened immensely. By means of commerce and the establishment of colonies, Europe gains a predominant influence over all other continents, and in return is made to feel the inevitable effects of contact with others. Its own conditions change perceptibly.

Then the great structure of the Roman Church suffers a remarkable shock and subsequent changes, by means of the Reformation suggested by Martin Luther, whereby papacy and hierarchy fall from the height to which they had been raised during the Middle Ages. This is not accomplished by one man, nor in one stroke, but by a most remarkable series of contests in literature and on the battle-field. And though the most powerful princes and the greatest generals during the sixteenth and seventeenth centuries, such as Emperor Charles V., King Philip II., Duke Alba, Wallenstein, and Tilly, enter the arena in defence of papacy; and though, in defence of the old Church, the most destructive war known in all history, the Thirty Years' War, is fought, — nevertheless the Church reformation cannot be crushed, but makes great progress, especially in Northern Europe. In consequence of direct appeal to the Scriptures, freedom of faith and thought and investigation in all domains of human exertion is established, and gains a foothold everywhere. Though the

Roman Church does not succumb, it loses entire nations from its grasp, and is obliged to abandon its strict adherence to mediæval principles and practices. In short, the Church is, though against its will, modernized like every thing else. Perhaps no other agency was more effectual in overthrowing papal authority than the direct appeal to the Holy Scriptures, which were made accessible by the invention of the art of printing. If there were no other great events to mark the beginning of a new era, this invention alone would be sufficient.

Also in the organism of the states we notice remarkable changes. When during the Middle Ages the feudal system was in full bloom, there were literally only two classes which enjoyed civil rights: the clergy and the nobility. Under protection of the Church there arose by degrees political structures which claimed recognition. And the remnants of ancient Roman municipalities were gathered up; the former communities were rejuvenated, and gained rights and privileges which made them more or less independent of feudal lords. They soon felt themselves strong enough to claim recognition as a "third estate," that is, as a third component part of the state. Kings and emperors sought assistance from the cities against the arrogance of petty princes and crown-vassals, and were willing to grant liberties and privileges to the communities, which thus became the centres of civil liberty and virtue. In consequence of the rapid growth of the cities, the feudal system was shaken in its foundation; and

toward the close of the fifteenth century it may be said to have met its doom.

Another very vital change is wrought by the new art of warfare, which came into general use toward the close of the Middle Ages in consequence of the re-invention of gunpowder. Ever since the thirteenth century, war was not in every case carried on with the assistance of feudal vassals, but in many cases with hired troops. This was done especially by the English kings on French soil. The victories won by the Swiss peasants over the mailed knights of Austria and Burgundy, and the panic that went before the foot-soldiers of the Turks (the so-called Janitschars), led to the conviction that war could not be carried on except with great masses of infantry. But the nobles declined to serve as foot-soldiers with gun in hand. They preferred to fight on horseback with sword in hand. They left the gun in the hands of hired troops, reserving for themselves the positions of officers and commanders.

However, with the decline of the feudal system, which was based upon birthright, the states of Europe did not at once receive a constitution which secured general liberty, that is, protection to every one against arbitrary action of others. What the "upper classes" thus lost, did not profit the "lower," because kings and princes, who formerly had but very limited power over their crown-vassals, now grew strong everywhere, and became absolute. This transit through absolutism was necessary, in order to enable the lower enslaved classes to enjoy the blessings of

some liberty and almost entire civil equality. Before the majesty of the throne, all subjects became equal; and it could not serve the absolute prince to give one class of his subjects great advantages over others.

The transition from the feudal system to absolute monarchy took place in different ways. In some countries, as in England and Spain, the sovereign succeeded in breaking the power of his vassals so well, that they lost, one after another, their independence, and remained only a power in the state, as a class; in other countries, notably in France, the king united in more peaceful manner the power of his vassals with his own; and still in others, in Germany and Italy, the vassals succeeded in freeing themselves from their duties as vassals, and in becoming independent sovereigns. Only very recently the different principalities in Italy were unified as one state; and in Germany there are still some twenty odd states, though under the common leadership of Prussia.

Lastly, the attitude of the states toward each other became vastly different from what it had been. During the Middle Ages, the nations of the Christian Germanic world existed in entire isolation from one another. No nation troubled itself much about the affairs of the neighboring state. Only the Pope had ambassadors at the capitals of the different European countries; and he mediated, interceded, or interfered, when occasion demanded it. When, in consequence of the Church reformation, the power of the Pope vanished in entire nations of the North, and when inter-

communication among the different countries increased rapidly, the Church could not act in that capacity any longer. Just as little could the waning power of the German emperor establish a central power, or act as court of arbitration, among the Christian nations of Europe. Still the one thought, that all the Christian states, nationally independent of each other as they were, should form a unit as against the Turks, became predominant. And from this thought is derived the other consequential idea, that all the states of Europe are by rights one family, a system of states. But since they are, and always were, of different sizes and degree of power, and France and Austria were the mightiest, it was thought that the equilibrium of power could best be preserved if the smaller states would hold the balance of power. This balance of power was often thrown into the scale of the one or the other, as the occasion seemed to suggest; that is, as it became apparent that either the one or the other empire was about to become the universal monarchy in Europe. A natural sequence of this state of affairs was the change of mercenary troops into standing armies. These soon became oppressive burdens to the people; as, for instance, when under Louis XIV. the French army, which had only sixteen thousand men at the time of Henry IV., was increased to one hundred and fifty thousand men. There were very important sequences to this vital change. In order to defray the expenses caused by the maintenance of large armies, new sources of national wealth had to be opened; and all

classes of society were now called upon, by legislation, to contribute, in form of taxes, to the income of the state.

The enlisting of strong standing armies became so difficult in the course of time, that the rulers had to resort to national armies drafted from the people, regardless of wealth or social position of the individual.

The enormous increase of duties and taxes finally awakened the desire of the lower classes, hitherto excluded from the government, to take part in it. They did not care to contribute funds for the maintenance of the state, if they could not have a voice upon the manner of distribution of the funds. The provisions of the English constitution certainly acted as a stimulus upon the Continent. But the rulers and privileged classes were unwilling to grant to the common people the desired participation in the government. This refusal of just demands made the people more impetuous; and at last bloody revolutions and violent disturbances followed, which resulted in the commoners' victory over the privileged classes.

While thus, politically, the civilized world has come to a final solution, namely, to a form of government which is either the representative republic or the next best thing to it, a constitutional monarchy; it is, as regards social relations, in the midst of powerful and conflicting currents caused by wonderful inventions, notably by the application of steam-power and electricity, inventions which may be said to be still in their infancy.

Four periods are to be distinguished in modern history.

The first period extends from the beginning of the Reformation, 1517, to the conclusion of the Thirty Years' War, 1648. In this period, religion is the centre of all political commotion.

The second period extends from the Westphalian Peace, 1648, to the beginning of the French Revolution, 1789. In this period religion, as a political factor, is replaced by purely worldly interests. France gains for a short time supremacy over the Continent; England becomes the ruler of the sea; Sweden recedes before advancing Russia; Prussia is elevated, by the genius of Frederick the Great, to a European great power; and the English colonies in North America secure their independence, and propagate the idea of republicanism.

The third period extends from the beginning of the French Revolution, 1789, to the second Parisian peace, 1815. This is the time in which ancient historical right is fought violently; in which the people wrestle with their oppressors, and endeavor to replace historical by natural right. The French Revolution convulses all European states, but does not succeed in establishing universal freedom. It elevates Napoleon, who temporarily subdues Europe under an unendurable military despotism.

The fourth period extends from the second Parisian peace, 1815, to the close of the recent Franco-German war, 1871. Its character is a continual wrestling

between absolutism and constitutionalism, between conservatism and liberalism. As soon as the people had gained new strength after the exhaustive Napoleonic wars, the desire for more liberal political institutions were awakened anew. France again took the lead. The July revolution in 1830, the February revolution in 1848, caused the granting of constitutional form of government in all countries in Europe, except in Russia and Turkey. And the liberation of slaves in America, of serfs in Russia, is to be classed among the manifestations of this universal demand for liberty. Aside from this popular demand, there is another most powerful current, which is drifting toward consolidation and unification of nations. We notice its manifestations in Italy, 1859; in Germany, 1870; in Ireland, and on the Balkan peninsula: but they have occurred so recently, that a mere mention must suffice.

WHAT IS NIHILISM?

Nihilism is a term very hard to define. If you put the question to a Russian, you will scarcely obtain a precise answer, certainly not a satisfactory one. His answer will be in accordance with his social position and his mode of thinking. So the Russian general will say, "A Nihilist? Well, he is a fellow who does not respect the Lord on high, not even his emperor." Old men, who have their origin in a time in which man's thoughts and actions moved in firmly established grooves, will say, "A Nihilist? Why, he is a man

without principles." If you ask a young man, perhaps a student, he will answer, "A Nihilist? Ah! he is the bearer of Russia's future." Most people shrug their shoulders, and answer you, "A Nihilist? Well, you see, that is an annihilist."

It is a thankless task to force an idea like this into the Procrustes bed of a definition. We all think, undoubtedly, that we have a clear comprehension of the American "go-ahead-ness," yet we should need a good many words if we were called upon to explain the term. If it manifests itself in the way it was manifested in Cincinnati during the late flood, we may think it a virtue. Again, if it manifests itself in carelessness in the erection of bridges and other structures which show dilapidation before they are completed, that very go-ahead-ness may be termed a crime.

There is a word in the Russian language used quite frequently. It is *Nitschewo:* Never mind, Don't care! You can hear it in all classes of society, and at every occasion. Every thing the Russian thinks, feels, and does seems saturated with this *Nitschewo*. A criminal carelessness pervades every thing in Russia. Now, this connection between a national phrase, and a mode of thought which seems to be national also, is no accidental connection. An autocratic government like that of Russia seems to nurture a carelessness as we find it there among all classes of society. There is no proper field of activity for the Russian youth, except the career of an office-holder; and that does not afford satisfaction, either for ambition or for other high and

noble motives. They have no arena in which they might measure and develop their talents.

Our country will never permit the growth of a disease like Nihilism, because the inborn rights of the human being are respected, even in the child. In Russia, the individual person counts for nothing: he derives all his social value from the Emperor. *He* makes the laws, and ninety millions of subjects must obey. It is always a characteristic indication of a strong revolutionary current in a state, when people dare to attribute to the government the crimes its subjects commit; and that is done in Russia every day.

The stupid masses of the people consider the autocratic *régime* and the cleptocratic office-holder traditions just as sacred as the dogmas of their orthodox faith. In diametrical opposition to this immovable sediment of society, we find a younger generation nurtured with the liberal and radical ideas of Western Europe. If these ideas were as well digested in Russia as they are in Western Europe, they might tend towards elevating the Slavic race. But that is not the case. The great majority, even of the better-educated class, is of the opinion that the time for a constitutional government has not yet come. Hence this time of *fermentation*, and the exceptional force of Nihilism, which has in the course of time developed into destructiveness, iconoclasm in the widest sense of the word.

A TALK WITH MY BOYS.

THE boys had had a lesson in American history. The Revolutionary War had been the subject of the lesson. The rather clumsy way in which they applied the word "revolution" made me suspicious in regard to their comprehension of the word "revolution:" so I interrupted the easy flow of catechization by asking the boys, *What is a revolution?* A blank stare was the answer.

After a few moments the boldest ventured to define it by saying, "It is a great state-action." Then a more practical head suggested that he could not see the difference between the revolution of a wheel and that of a state, for every revolution of a state that he had heard of was a turning-over, or a complete revolving of things that were time-honored. This was as shrewd an answer as I could have expected. I dwelt upon it, touching upon the etymology of the word, until I had the definition clearly established; referring to the fact that in a state revolution the government is upset, overturned.

And now the boys seemed to me ready for the next step. So I asked, "What is the difference between a *revolution* and a *rebellion?* Why is not the secession of the Southern States called a revolution also? I am sure the government was upset." The boys seemed nonplussed. I saw them think hard. Finally one ventured to say, "I think I can answer the question." Said he, "If the secession of the Southern States had

been not merely temporary, but had become permanent, then it would have been called a revolution, that is, a complete revolving of the government. But the opposite took place. The secession was not successful, and the States were obliged to return under the old established government. Thus, if the wheel had begun to go round, it was forced backward into its old position. So I define a rebellion by saying, 'an unsuccessful attempt at revolution, or an unsuccessful revolution, in short.' "

Call this clumsy logic, if you please: it was a neat and shrewd way of clearing up an obscure idea.

OUR COUNTRY.

If the fathers of our Republic could to-day see the proud and powerful union of States, the foundation of which they laid a little more than one hundred and ten years ago, what astonishment, what admiration, what justifiable pride, would fill their hearts! The thirteen Colonies clustered along the Atlantic coast, scarcely able to resist their oppressors, have become a vast structure that reaches from ocean to ocean, from the dreary regions of the icy North, to the fertile plains of the sunny South; immeasurably rich in natural products of all zones, in inexhaustible treasures of the deep, in products of a fabulously developed industry; rich in credit, honor, reputation, and authority before the world; richer still in intelligence, energy, enterprise, and inventive power of its citizens; hurrying onward in impetuous flight in all domains of human

exertion, and snatching the palm of victory from the countries of the Old World, that boast of a civilization a thousand years old.

The genius of liberty and independence, the creative power of unfettered self-activity, of unrestrained development, inspired the originally small Union; and one hundred years — a short space of time in the life of a nation — sufficed to elevate it to one of the great powers of the world, looked upon by monarchical Europe with envy and badly concealed anxiety. And yet the young giant has not reached his full growth: yet daily new blood rushes into his veins, swelling them to renewed ardor; he peoples the wilderness; and before a second century has come to its close, the stars and stripes are destined to wave over the greater part of this continent which fate seems to have allotted to him.

(The above may be used as a declamation. It is suited to awaken patriotism, and may therefore be applied in other than history classes.)

WHAT I HEARD FROM THE STUMP.

One day I heard a man speak from the stump; and it seemed to me, he spoke in pica type, not in minion. Said he, "We are living off the honesty of Washington, Jefferson, and Franklin; and I tell you, that stock of honesty is well-nigh used up. It is about time for us to develop some of our own. Wherever I turn, — to politics, to commerce, to industry, to the financial world, to law, to medicine,

to education, to the ministry, — everywhere I find dishonesty, cheating, ballot-box stuffing, quackery in medicine, charlatanry in every field of human exertion, corruption on the bench, show and varnish in education.

"Boys, look back into history! When the proverbial simplicity, honesty, uprightness, and patriotism of Cincinnatus, Fabricius, Fabius, and other Roman leaders, vanished, then the star of the Roman empire began to decline. History repeats itself; only don't forget that we are living in a time in which events, things, and persons come and go much faster than at the time of the Roman republic. Mark my words, boys, and replenish our stock of honesty, civil virtue, and patriotism. Poor little George's virtues won't hold out much longer."

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